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Financial Advisory

# Ministry of Education Effectiveness & Efficiency Review

## Phase 1 Review
## Rainy River Transportation Services

April 2007

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# Executive Summary

## Introduction

This report details the findings and recommendations of an Effectiveness and Efficiency review (E&E Review) of the Rainy River Transportation Services ("Transportation Department") conducted by a review team selected by the Ministry of Education. This review is the result of recent governmental initiatives to establish an equitable approach to reforming student transportation across the province and minimize the administrative burden for non-transportation staff associated with providing safe, reliable, effective, cost efficient transportation services. This section of the report is designed to provide an overall assessment of Transportation Department and detail the findings and recommendations that were particularly noteworthy. These major findings and recommendations are enhanced and supplemented by the specific findings and recommendations detailed in each section of the body of the report.

The E&E Review evaluated the Transportation Department's performance in four specific areas of operation including Consortium management; policies and practices; routing and technology use; and contracting practices. The purpose of reviewing each of these areas was to evaluate current practices to determine if they are reasonable and appropriate; identify whether the consortia has implemented any best practices; and provide recommendations on opportunities for improvement in each of the specific areas of operation. The evaluation of each area was then utilized to determine an overall rating for the Consortium that would be used by the Ministry to determine any in-year funding adjustments that would be provided.

## Effectiveness and Efficiency Review Summary

The Transportation Department provides services to a largely rural area centered on two essentially distinct population centers: a western area containing Rainy River and Fort Frances and the eastern area of Atikokan. The Transportation Department provides transportation services to approximately 2,500 students and 16 schools. Nearly 74% of all students in the area are provided bus service through the Transportation Department. The geographic challenges that have a direct impact on routing include: narrow side roads, dead-end roads (leads to unsafe or impossible turnarounds for buses), lack of infrastructure in some communities (sidewalks, etc.), highway crossings, and varying degrees of municipal road service (some areas only have one plough for the entire municipality making it difficult to ensure that roads are clear of snow before the morning route). A unique challenge in this area is the fact that the time zone line is just east of their district's boundary by the town of Atikokan. Atikokan never changes its clock resulting in time zone differences from November until April.

The Transportation Department faces two primary service-related challenges. The first is a large, sparsely populated area that must be serviced. The lack of density limits the ability of the Transportation Department to make extensive use of efficiency measures such as run tiering (where one bus will service multiple schools within different time blocks) given the time required to traverse the large land area. The second challenge relates to the limited size of the transportation operation. Small transportation operations must oversee and manage the same legal, regulatory, and operational requirements as larger operations, but this is typically done with fewer people who have broader responsibilities. The need to maintain the continuity of daily operations often limits the ability of smaller sites to perform strategic and long term planning. While size does not prevent these tasks from being accomplished, it is necessary to consider this context when evaluating the timeliness of task completion.

Despite their limited staffing, the Transportation Department has been able to realize a number of notable successes since the integration of services with Northwest. The efficiencies gained over the years are primarily a result of diligent efforts on the part of the Transportation Officer. The primary accomplishment has been the reduction of 900 kilometres and 20 hours time from the daily travel schedule. These efforts have resulted in cost savings to both Boards. Additional noteworthy accomplishments include:

- An effective implementation of a complex, highly functional transportation routing software application. This implementation was achieved with limited technical assistance.
- As a self taught user of the system, the Transportation Officer has demonstrated a willingness to learn a complex application and a desire to utilize the application as an operational tool to develop a rational routing scheme in a large geographic, low density area. In addition, efforts have been made to cross train transportation personnel on the use of the routing software to ensure that operational coverage can be provided in the event of the Transportation Officer's absence.
- Policies have generally been harmonized except in the Atikokan area where exceptional circumstances have compelled the provision of increased levels of service.
- Establishment of a common contract structure that contains appropriate clauses to set service expectations.
- Recent implementation of route auditing procedures that have allowed the Transportation Officer to more clearly and accurately evaluate both service provision by the contractors and the accuracy of data maintained in the routing software.

The Transportation Department should focus its near term efforts on establishing a more formal structure and framework for its operations. Although management practices are functioning effectively at the current time, the Transportation Department lacked formal agreements between Partner Boards and with Boards purchasing services from the Transportation Department. In addition, though the Transportation Officer is a competent user of the routing software, additional training should be provided to allow for more detailed analysis of routing alternatives that may offer improvements to service or additional reductions in cost. Other technical improvements that should be made to the software include combining the two jurisdiction maps and databases (East and West) into one to simplify and improve reporting processes and reconsidering the existing coding structure to improve analytical capabilities. Finally the Transportation Department should establish a competitive process for the allocation of bus routes so that additional service requirements can be clearly defined and compensation paid to Operators can be based on market rates.

The opportunity exists for the Transportation Department to be a highly effective provider of services in a challenging area. The Transportation Officer has demonstrated a commitment to performing the tasks required to provide effective and cost efficient services. Continued refinement of identified best practices and the implementation of the recommendations identified above and throughout the report will be required to ensure that service delivery practices continue to evolve in a manner that addresses the management and operational challenges of a small, remote transportation program.

## Funding Adjustment

Based on the E&E Rating of the Transportation Department as a **moderate** Consortium, and in applying the Ministry's Funding Adjustment Formula, the following 2006-07 in-year funding increases will be made:

- Rainy River District School Board: $207,152; and
- Northwest Catholic District School Board: $20,553.

This funding adjustment will narrow 60% of the transportation deficits for Rainy River and Northwest (the adjustment to Northwest funding is intended to support the portion of Northwest operations that are provided by Rainy River).

# 1. Introduction

## 1.1 Background

### 1.1.1 Funding for Student Transportation in Ontario

The Ministry provides funding to Ontario's 72 school boards for student transportation. Under Section 190 of the *Education Act* (Act), school boards "may" provide transportation for pupils. If a school board decides to provide transportation for pupils, the Ministry will provide funding to enable the school boards to deliver the service. Although the Act does not require school boards to provide transportation service, all school boards in Ontario provide service to eligible elementary students and most provide service to eligible secondary students. It is a school board's responsibility to develop and maintain its own transportation policies, including safety provisions.

In 1998-1999, a new education funding model was introduced in the Province of Ontario outlining a comprehensive approach to funding school boards. However, a decision was made to hold funding for student transportation steady, on an interim basis, while the Ministry worked to develop and implement a new approach. From 1998-1999 to 2007-2008, an increase of over $195 million in funding has been provided to address increasing costs for student transportation, such as fuel price increases, despite the fact that there has been a general decline in student enrolment in recent years.

### 1.1.2 Transportation Reform

In 2006-07, the government began implementing reforms for student transportation. The objectives of the reforms are to build capacity to deliver safe, effective and efficient student transportation services, achieve an equitable approach to funding and reduce the administrative burden of delivering transportation, thus allowing school boards to focus on student learning and achievement.

The reforms will include a requirement for Consortium delivery of student transportation services, effectiveness and efficiency reviews of transportation consortia, and a study of the benchmark cost for a school bus incorporating standards for safe vehicles and trained drivers.

### 1.1.3 The Formation of School Transportation Consortia

Ontario's 72 school boards operate within four independent systems:

- English public;
- English separate;
- French public; and
- French separate.

As a result, a geographic area of the province can have as many as four coterminous school boards (i.e. boards that have overlapping geographic areas) operating schools and their respective transportation systems. Opportunities exist for coterminous school boards to form consortia and therefore deliver transportation for two or more coterminous school boards in a given region. The Ministry believes in the benefits of Consortia as a viable business model to realize efficiencies. This belief has been endorsed by the Education Improvement Commission in 2000 and proven by some established Consortium sites in the province. Currently, the majority of school boards cooperate to some degree in delivering transportation services. Cooperation between boards occurs in various ways, including:

- One school board purchasing transportation service from another in all or part of its jurisdiction;
- Two or more coterminous school boards sharing transportation services on some or all of their routes; and
- Creation of a Consortium to plan and deliver transportation service to students of all partner

school boards.

Approximately 99% of student transportation service in Ontario is provided through contracts between school boards or transportation consortia and private transportation Operators. The remaining 1% of service is provided using board-owned vehicles used to complement services acquired through contracted private Operators.

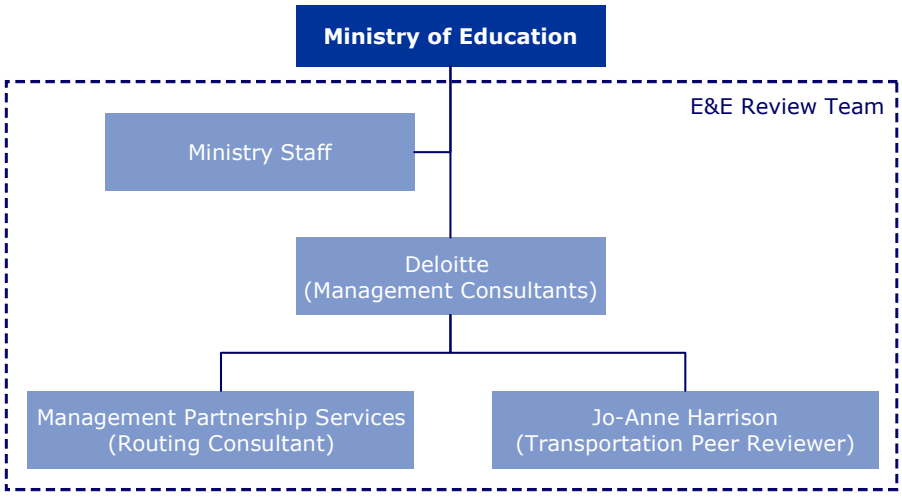
### 1.1.4 Effectiveness and Efficiency Review

According to the Ministry Consortium guidelines, once a Consortium has met the requirements outlined in memorandum SB:13, dated July 11, 2006, it will be eligible for an E&E review. This review will be conducted by the E&E Review Team who will assist the Ministry in evaluating Consortium management, policies and practices, routing and technology, and contracts. These reviews will identify best practices and areas for improvement, and provide valuable information that can be used to inform future funding decisions. Over the next two years, the Ministry plans to perform three phases of reviews (collectively the "E&E Reviews") on transportation sites across the province.

### 1.1.5 The E&E Review Team

To ensure that these reviews are conducted in an objective manner, the Ministry has formed a review team (the "E&E Review Team" as defined in Figure 1) to perform the E&E Reviews. The E&E Review Team was designed to leverage the expertise of industry professionals and consulting firms to evaluate specific aspects of each Consortium site. Management consultants were engaged to complete assessments on Consortium management, policies and practices, and contracts. A routing consultant was engaged to focus specifically on the acquisition, implementation, and use of routing software and related technologies. The Transportation Peer Reviewer has provided the E&E team with valuable insight into student transportation delivery in Ontario.

**Figure 1: E&E Review Team**




### 1.1.6 The Role of the School Bus Cost Study

The Ministry has acquired the services of a consultant through a separate request for proposal process to conduct a detailed cost study on the cost of contracting and operating a 72 passenger school bus. The cost model will complement the findings of the E&E Reviews. At the time the E&E results from the Phase 1 review are released, the results of the cost study will still be unknown. Any additional funding adjustments resulting from the results of the cost study will be determined at a later date.

## 1.2 Scope of Deloitte Engagement

Deloitte was engaged to lead the Team and serve as the Management Consultants of the E&E Review Team, as follows:

- Lead the E&E Review for each of the four (4) transportation Consortium to be reviewed in Phase 1 (refer to Section 1.1.4);
- At the beginning of each E&E Review, convene and moderate planning meetings to determine data

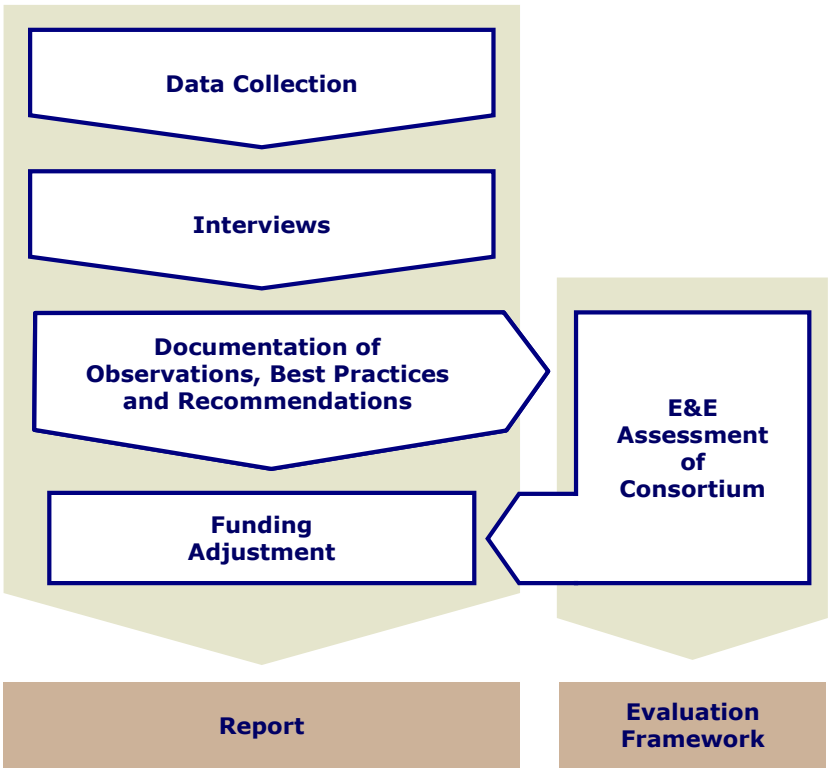
required and availability prior to the review;

- Lead the execution of each E&E Review. The Ministry facilitated the process by providing the Consortium with information required in advance so that preparation and collection of information would be done prior to the on-site review;
- Review Consortium arrangement and governance structures, policies and practices including specialized and special needs transportation, Partner Board transportation policies, contracting procedures;
- Incorporate the results of the routing and technology review to be completed by MPS; and
- Prepare a report for each Consortium which has undergone an E&E Review in Phase One. The target audience for the report will be the Ministry, the Consortium and its Partner Boards. Once finalized, each report will be released to the Consortium and its Partner Boards.

## 1.3 Methodology Used to Complete E&E Review

The methodology for the E&E Review is based on a 5 step approach, as summarized in the following sections.

**Figure 2: E&E Review Methodology**




A site review Report which documents the observations, assessments and recommendations is produced at the end of a site review. The Evaluation Framework, which provides the details on how the Assessment Guide was applied to reach an Overall Rating of each review site, has been developed to provide consistency.

### 1.3.1 Step 1 – Data Collection

Each Consortium under review was provided with the E&E Guide (refer to document 3 in Appendix 3) from the Ministry of Education. This guide provides details on the information and data needs that the E&E review team would require, and the E&E Guide will become the basis for the data collection.

Data is collected in four main areas:

1. Consortium Management;
2. Policies and Practices;
3. Routing and Technology; and
4. Contracts.

### 1.3.2 Step 2 – Interviews

The E&E Review Team identified key Consortium staff, outside stakeholders and key policy makers with whom interviews would be conducted to further understand the operations and key issues impacting delivery of effective and efficient student transportation services.

### 1.3.3 Step 3 – Documentation of Observations, Best Practices and Recommendations

Based on data collected and interviews conducted, the E&E Review Team documented their findings under three key areas:

- Observations which involved fact based findings of the review, including current practices and policies;
- Best Practices used by the Consortium under each area; and
- Recommendations for improvements based on the Assessment Guide. Figure 3 provides a summary of the key criteria used in the Assessment Guide to determine the effectiveness and efficiency of each Consortium.

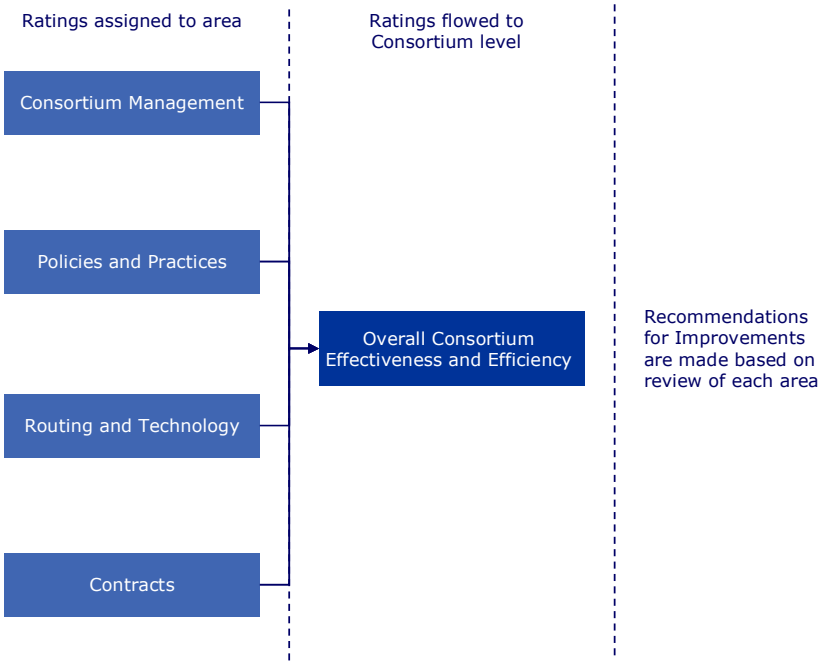
**Figure 3: Criteria of an Effective and Efficient Consortium**

| | Consortium Management | Policies and Practices | Routing and Technology | Contracts |
|---|---|---|---|---|
| **Effectiveness** | • Distinct entity focused on providing student transportation services for the partner boards<br>• Well defined governance and organizational structure with clear roles and responsibilities<br>• Oversight body exists with the mandate to provide strategic directions to the consortium management on the provision of safe, effective and efficient transportation service to support student learning<br>• Management has communicated clear goals and objectives of the Consortium and these are reflected in the operational plan<br>• Well established accountability framework reflected in the set up and operation of the consortium including documentation of terms in a Consortium Agreement<br>• Operations are monitored for performance and continuous improvement<br>• Financial processes ensure accountability and equity to Partner Boards<br>• A budgeting process is in place which ensures timely preparation and monitoring of expenses<br>• Key business relationships are defined in contracts | • Development of policies is based on well defined parameters as set by strategic and operational plans to provide safe, effective and efficient transportation service to students of the partner boards; and<br>○ Policy decisions are made with due consideration to financial and service impacts to partner boards<br>○ Communication between the consortium and partner boards facilitates informed decision making on issues directly affecting student transportation<br>○ Consortium's policies and practices are adequate and in compliance with all relevant safety regulation and standards<br>○ Practices on the ground follow policies | • Advanced use of transportation management software to store student data, and create a routing solution.<br>• Disaster recovery plans and back up procedures are in place and operating properly<br>• Responsibility and accountability for student data management is clearly identified<br>• Routing is reviewed regularly<br>• Reporting tools are used effectively<br>• Special needs routing is integrated with regular needs where reasonable | • Competitive contracting practice is used<br>• Contract negotiations are transparent, fair, and timely<br>• Contracts are structured to ensure accountability and transparency between contracted parties<br>• Contracts exist for all service providers<br>• Ongoing compliance checks for safety, legal and service requirements are performed by the consortium |
| **Efficiency** | • Oversight committee focuses only on high level decisions<br>• Organizational structure is efficient in utilization of staff<br>• Streamlined financial and business processes<br>• Cost sharing mechanisms are well defined and implemented | • Harmonized transportation policies between partner boards enable efficient planning<br>• Proper level of authority delegated to consortium to enable the realization of potential efficiencies e.g. bell time setting<br>• Best practices in planning are adopted e.g. utilize tiered runs and combination runs to maximize the use of available capacity<br>• Public transit usage is optimized where available and efficient<br>• Service levels are reasonable and comparable to common practices | • System can be restored quickly if database fails<br>• Student data is accurate, requires little post processing verification<br>• System functionalities are used to identify efficiencies | • Contracts awarded are based on market prices and best value for money<br>• Fair payment terms are included in contracts and implemented with clarity to both parties |

### 1.3.4 Step 4 and 5 – E&E Assessment of Consortium and Site Report

The Assessment Guide was developed to enable the E&E Review Team to provide each Consortium that undergoes an E&E Review with a consistent, fair and transparent method of assessment. The Assessment Guide is broken down between the four main components of review (i.e. Consortium Management, Policies and Practices, Routing and Technology, and Contracts) and, for each, illustrates what would constitute a specific level of E&E (refer to Figure 4 for diagram of process).

**Figure 4: Assessment of Consortium – Diagram Flow**




The Evaluation Framework provides details on how the Assessment Guide was applied, including the use of the Evaluation Work Sheets, to arrive at the final Overall Rating. The E&E Review Team then compiled all findings and recommendations into an E&E Review Report (i.e. this document).

### 1.3.5 Funding Adjustment

The Ministry will use the results of the E&E reviews and the cost benchmark study to inform any future funding adjustments. Only Boards that have undergone E&E Reviews are eligible for a funding adjustment. Figure 5 illustrates how the Overall Rating will affect a Board's transportation expenditure-allocation gap.

**Figure: 5: Funding Adjustment Formula**

| Overall Rating | Effect on deficit boards[1] | Effect on surplus boards[1] |
|---|---|---|
| High | Reduce the gap by 100% (i.e. eliminate the gap) | No in-year funding impact; out-year changes are to be determined |
| Moderate-High | Reduce the gap by 90% | Same as above |
| Moderate | Reduce the gap by 60% | Same as above |
| Moderate-Low | Reduce the gap by 30% | Same as above |
| Low | Reduce the gap in the range of 0% to 30% | Same as above |

### 1.3.6 Purpose of Report

This Report serves as the deliverable for the E&E Review conducted on Rainy River Transportation Services by the E&E Review Team during the week of January 22, 2007.

### 1.3.7 Material Relied Upon

Refer to Appendix 3 for a list of documents that the E&E review team relied upon for their review. These documents were used in conjunction with interviews with key Consortium staff, outside stakeholders, and key policy makers.

[1] This refers to boards that have a deficit/surplus on student transportation (see Section 7 – Funding Adjustments)

### 1.3.8 Limitations on Use of This Report

The purpose of this Report is to document the results of the E&E Review of Rainy River Transportation Services. The E&E Review is not of the nature or scope so as to constitute an audit made in accordance with generally accepted auditing standards. Therefore, as part of this E&E Review, Deloitte has not expressed an opinion on any financial statements, elements or accounts to be referred to when reporting any findings to the Ministry. Additionally, procedures used by the E&E Review Team are not intended to disclose defalcations, system deficiencies or other irregularities.

# 2. Overview of Consortium

## 2.1 Introduction to Rainy River Transportation Services

Rainy River Transportation Services ("Transportation Department") is the department within the Rainy River District School Board ("Rainy River") that provides student transportation services to both Rainy River and the Northwest Catholic District School Board ("Northwest"). Northwest purchases service from the Transportation Department for its elementary schools in the coterminous district; Northwest does not operate any secondary schools in the district. In addition, some of the area First Nation communities purchase transportation services from the Transportation Department.

The Transportation Department, at the time of our review, did not meet the full requirements as outlined in Memorandum 2006:SB13 to qualify as a Consortium in that there was neither a Consortium Agreement in place nor a Management Committee formally in place. The E&E Review Team has been asked to review the E&E of the Transportation Department with the understanding that the Transportation Department is expected to meet full Consortium status by the Ministry's required deadline of September 2008.

Table 1 below provides a summary of key statistics at each Board.

Note that this information covers only the portion of Northwest that is coterminous to Rainy River.

**Table 1: 2005-06 Transportation Survey Data**

| Item | Rainy River | Northwest | Total |
|---|---|---|---|
| Number of schools served | **14** | **3** | **17** |
| Total special needs[2] transported students | 10 | 0 | 10 |
| Total riders requiring wheelchair accessible transportation | <10 | <10 | <10 |
| Total specialized program[3] transportation | 26 | 132 | 158 |
| Total courtesy riders | 51 | 14 | 65 |
| Total hazard riders | 93 | <10 | <103 |
| Total students transported daily | **2,293** | **513** | **2,806** |
| Total contracted full- and mid-sized buses[4] | 38 | 13 | 51 |
| Total contracted mini-buses | 3 | 1 | 4 |
| Total contracted school purpose vehicles[5] | 0 | 0 | 0 |
| Total contracted physically disabled passenger vehicles (PDPV) | 0 | 0 | 0 |
| Total contracted taxis | 0 | 0 | 0 |
| Total Number of Contracted Vehicles | **41** | **14** | **55** |

[2] Includes students requiring special transportation such as congregated and integrated special education students who require dedicated routes and/or vehicles; students that must ride alone; students that require an attendant on the vehicle.

[3] Includes students transported to French immersion, magnet and gifted programs. Students with special needs who are transported to specialized programs are captured as special needs transported students.

[4] Includes full-sized buses, mid-sized buses, full-sized buses adapted for wheelchair use and mid-sized buses adapted for wheelchair use; all vehicle counts are rounded to the nearest whole number

[5] Includes school-purpose vans, mini-vans and sedans

**Table 2: 2005-06 Financial Data[6]**

| Item | Rainy River | Northwest |
|---|---|---|
| 2005/2006 Transportation Allocation | $2,183,120 | $994,499 |
| 2005/2006 Transportation Expenditure | $2,381,440 | $933,716 |
| 2005/2006 Transportation Surplus (Deficit) | $(198,320) | $60,783 |
| Percentage of transportation expenditure attributed to the Rainy River Transportation Services | 100% | 51% |

The Transportation Department services two essentially distinct population centers: a western area containing the communities of Rainy River and Fort Frances and the eastern area of Atikokan. Each area presents challenges that must be managed through the design and implementation of the routing scheme. The Transportation Department has established separate routing databases for each of these two areas.

The Rainy River district is largely rural with the largest community being Fort Frances with a population of 8,000. The Transportation Department provides transportation services to approximately 74% of all students in the area. The geographic challenges that have a direct impact on routing include: narrow side roads, dead-end roads (leading to unsafe or impossible turnarounds for buses), lack of infrastructure in some communities (sidewalks, etc.), highway crossings, and varying degrees of municipal road service (some areas only have one plough for the entire municipality making it difficult to ensure that roads are clear of snow before the morning route). Developing a routing network that supports a highly dispersed population in remote, unconnected areas is a challenge for a small transportation operation.

The Atikokan area is separated from Fort Frances by a very sparsely populated area. The Town of Atikokan is located on the eastern side of the central time zone but it does not recognize daylight savings time. Therefore, a one hour time difference exists across the Transportation Department's service area from November until April resulting in unique routing challenges that renders the two areas effectively separate. In addition, Atikokan has coterminous boundaries with a Catholic School Authority. Consequently, program offerings and transportation requirements are enhanced to match those offered by the School Authority and reduce the incentives for students to transfer between Boards. The unique time and service demands for this area have created a challenging set of circumstances for the Transportation Department to manage.

The Rainy River transportation department has been operating in a deficit since 1998. In 2001, prior to the formation of the joint Transportation Department, Rainy River undertook reforms to find efficiencies in transportation. Specifically, they sold all but one board-owned vehicle and moved to provide transportation services through contracted Operators. Additionally, they fully integrated transportation services with Northwest. Since 2003, the Transportation Department has reviewed its routing and has redesigned routes with the end result being a reduction of 900 kms and 20 daily hours travelled. Multiple runs and transfers have been introduced where feasible. The Transportation Department has expressed its commitment to continually review operations for efficiencies.

There are currently 47 routes in the district being served by 20 Operators. Fifteen of these Operators have only one route. The culture of the Operators in this area is quite different from other areas reviewed in Phase 1. Many of the Operators are Drivers themselves and have been providing service in the area for years – some as many as 30 years. The biggest issue in this area is the attraction of new Drivers to the district rather than retention as was noted in other urban areas.

[6] Based on Ministry Data – see Appendix 1.

# 3. Consortium Management

## 3.1 Introduction

Consortium Management encompasses the management of the entire organization providing student transportation services. The analysis stems from a review of the four key components of Consortium Management:

- Governance;
- Organizational Structure
- Consortium Management; and
- Financial Management.

Each component has been analysed based on observations from fact (including interviews) together with an assessment of best practices leading to a set of recommendations. These results are then used to develop an E&E assessment for each component, which is then summarized to determine an E&E assessment of Consortium Management as shown below:

| Consortium Management – E&E Rating: | Moderate-Low |
|---|---|

## 3.2 Governance

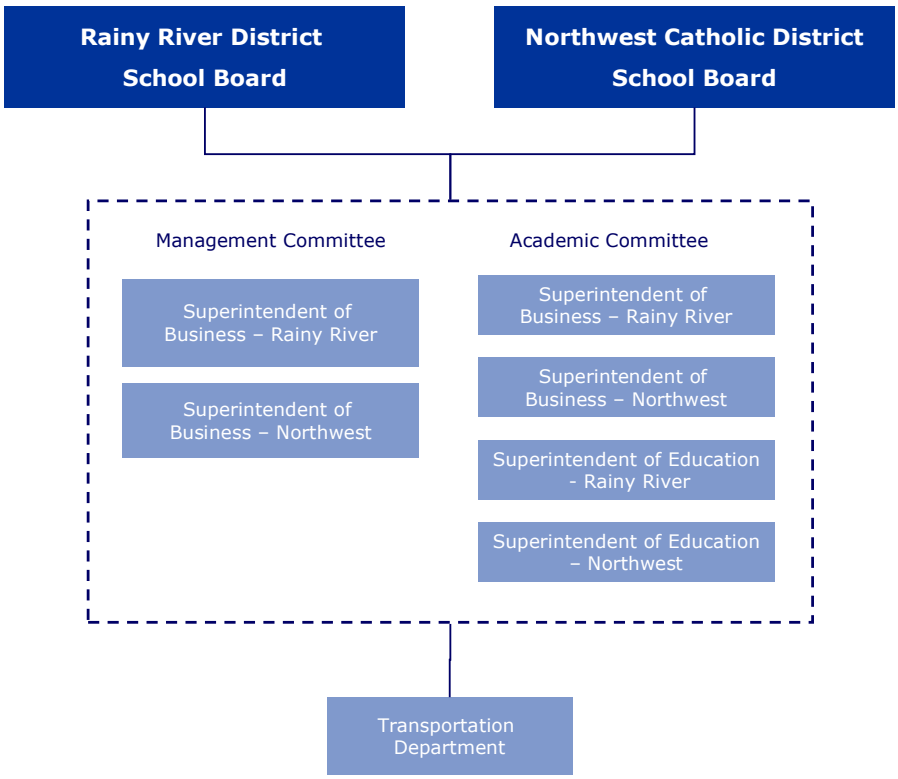
Governance refers to the way in which an organization is directed and controlled. Establishing administrative structures and processes which facilitate and monitor effective business management are primary responsibilities of a governance structure. Three key principles for an effective governance structure are accountability, transparency, and the recognition of stakeholders. In order to respect these three principles, it is important that the governance body be independent of the management of day-to-day operations.

### 3.2.1 Observations

*Governance Structure*

The Transportation Department has no structured oversight body in place, though a common practice of informal oversight is provided by the SBOs from Rainy River and Northwest. Direct oversight is provided by the Superintendent of Business at Rainy River and the Transportation Department operates as a department within the overall organizational structure of Rainy River. At the time of this review, the Transportation Department was in the process of formalizing the governance and oversight structure for the Consortium that will include the establishment of a Management Committee and an Academic Committee. The Management Committee will set policy and direction for the Transportation Department and the Academic Committee will review transportation policies and assist in the resolution of issues that have a direct impact on busing and schools (i.e. bell times, arrival/departure times). Members of the Committee will report back to their respective Boards. Figure 6 depicts the proposed governance structure.

**Figure 6: Proposed Committees**




*Trustee Committee and Subcommittees*

Currently, Rainy River trustees have a transportation subcommittee to deal with transportation-specific issues. Board administration makes recommendations to the committee regarding policy changes and provides reports on the impacts of these recommendations. The committee makes recommendations to the full board of trustees, who are collectively responsible for policy decisions. Although policies rarely change, the Committee meets regularly. Issues that are brought before these committees include discussions regarding the harmonization of policies with coterminous boards and the accommodation of the board-operated bus in Atikokan.

### 3.2.2 Recommendations

*Governance Structure*

At the time of the review the governance structure for the Consortium had not been formalized. It is recommended that the Boards work to implement the Management Committee and the Academic Committee as soon as possible. As the roles and responsibilities of each Committee are being reviewed, the following aspects of effective governance structure should be considered:

- The Committees have equal representation from all Partner Boards with a sufficient number of members to allow for effective decision making;
- Committee Members are independent of the daily operations and management of the Consortium. This allows the oversight function to operate objectively and in the best interest of the Consortium;
- The Consortium has a policy on governance that is transparent and clearly articulated. The policy should contain details on:
    - Selection of oversight committee members;
    - Term of oversight committee members;
    - Roles and responsibilities of members and committee;
    - Decision making (i.e. majority votes, consensus); and
    - Dispute resolution among Partner Boards.

- The Consortium has a clearly stated mandate, goals and objectives. Having a clearly stated mandate, goals and objectives will focus the Consortium on delivering its key services and guide operational planning and decision making.

## 3.3 Organizational Structure

An organizational structure can have the power to provide for effective communication and coordination which will enable operations to run efficiently. The roles and responsibilities within the organization should be well defined. This will lead to operational efficiencies by ensuring tasks are not being duplicated and issues raised can be addressed effectively by managing up the chain of command. Ideally, the organization is divided functionally (by department and/or area) and all core business functions are identified.

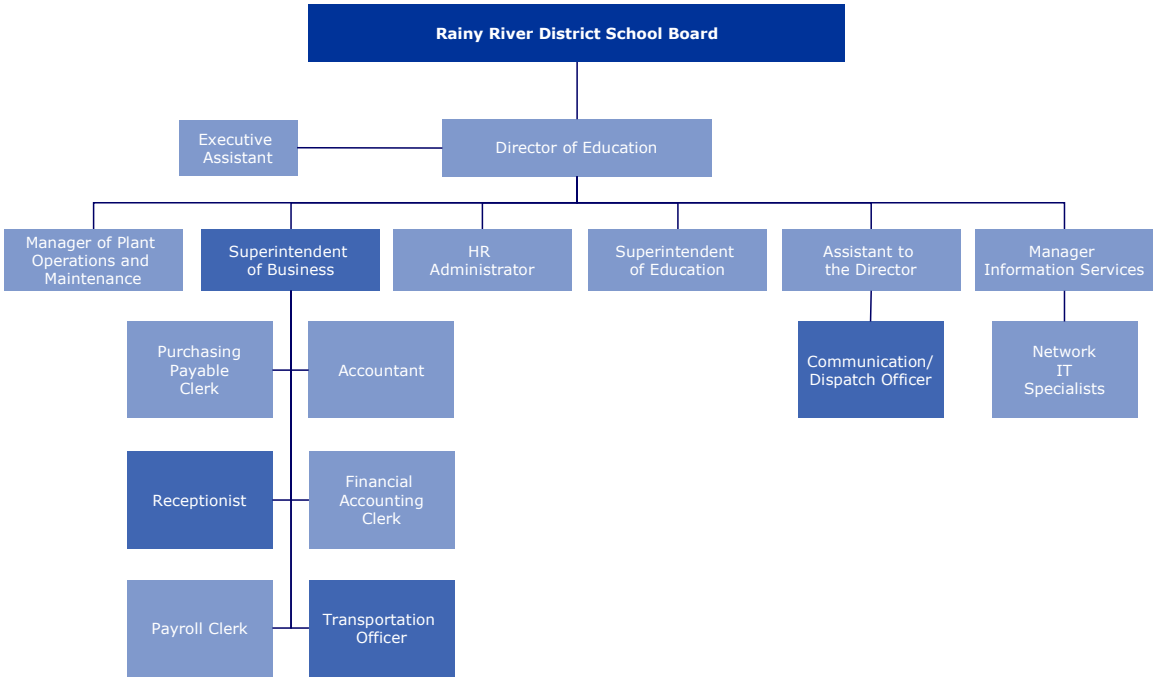
### 3.3.1 Observations

*Entity Status*

As a department within Rainy River, transportation offices are located within the Board office. The Transportation Department is comprised of the Transportation Officer and a Receptionist who acts as a casual assistant and helps during peak times to address planning, start up, safety training, and route audits. The roles and responsibilities of the Transportation Officer are clearly defined in a job description. In the absence of the Transportation Officer, both the Receptionist (casual assistant) and the Communication/Dispatch Officer are versed in using EDULOG.

Currently, the Transportation Department is not physically or legally independent from Rainy River. In most cases, it would be advised that the Consortium be both physically and legally separate from the Partner Boards to ensure transparency and independence. While there are several advantages to being a separate entity, it may not be appropriate in Rainy River given the unique circumstances of this site. The Transportation Department consists of one full-time employee, with both the SBOs of both Boards and the Receptionist performing transportation duties, as required. Additionally, Northwest plans to continue to purchase service from Rainy River. Given these facts, it appears to be appropriate to have the Transportation Department included within Rainy River both as a department that is not a separate entity and located physically within the same area. This structure allows for the Transportation Officer to have easy access to the SBO for guidance and approval and it allows the Transportation Officer to utilize the EDULOG software on the Board's computer network with access to their IT support on hand. Given the training that was provided to the Receptionist and Communication/Dispatch Officer, it is appropriate that they be located in the same area as the Transportation Officer in case a replacement is needed.

**Figure 7: Excerpt of the Rainy River Organizational Chart**



### 3.3.2 Best Practices

It is recognized that the Transportation Department has demonstrated a best practice in the following area:

- A reasonable organizational structure has been established that considers the limited scope of the transportation operation. The Transportation Officer is fully capable of planning for the region and the Board has trained additional employees on the use of EDULOG in case the Transportation Officer is absent.

## 3.4 Consortium Management

Consortium Management focuses on the operational aspects of the organization. This includes ensuring accountability of staff, focusing on continual improvement through operational planning and monitoring as well as ensuring risks are managed by having appropriate contracts and agreements in place to clearly define business relationships.

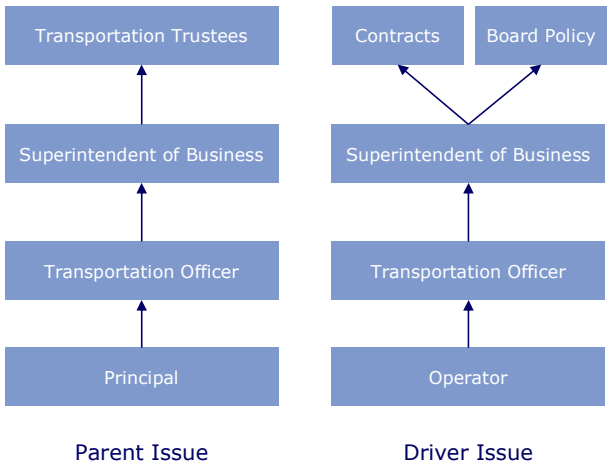
### 3.4.1 Observations

*Consortium Agreement*

There currently are no formal agreements or contracts between Rainy River and Northwest or area First Nation groups for services rendered through the Transportation Department. At the time of our review, Consortium Agreements were expected to be in place by the end of March 2007 but no draft agreements were available.

Given that no formal agreement exists, there is also no formal dispute resolution policy. However there are informal lines of communication for which complaints are dealt with, including mechanisms to escalate disputes. The transportation policies of both Rainy River and Northwest are the overall guiding tool for decision making when disputes arise. See Figure 8 for diagram of current dispute resolution practices.

**Figure 8: Dispute Resolution Practices**




If a parent has an issue it is directed first to the Principal of the school who in turn reports to the Transportation Officer for resolution. If the issue cannot be resolved at the Transportation Officer level, the issue is escalated to the SBO at Rainy River and then ultimately the Trustees for resolution. Though this is the current hierarchy, occasionally, parents will go directly to the Transportation Officer or to the SBO or Trustee. Since the process is not formally documented, practice does not always follow the intended method of resolution.

Where Drivers or Operators have an issue, their first point of contact is the Transportation Officer. If unresolved, the issue is brought to the attention of the SBO who refers to either the signed contract terms or the Board policies for resolution.

*Goals and Operational Plans*

Traditionally, the Transportation Department measures its success based on feedback and/or complaints received. This provides a generalized indication of the success or failure of route planning strategies but does not constitute a formal planning structure. Despite the lack of formalized planning mechanisms, Transportation Department staff have undertaken a number of noteworthy efforts to evaluate opportunities for service changes and monitor performance on an ongoing basis. In the 2005/2006 school year, the Transportation Officer prepared a report detailing the results of an efficiency study that was conducted. The report identified efficiencies in routing, identified areas for improved communications between the Transportation Department and the schools, identified areas for improvement in system data and identified areas for improvement to safety of buses. In the long term, the main goal of the Transportation Department is to operate transportation services with a balanced budget. Additionally, there have been attempts to be more proactive in evaluating operations by performing some route audits, however, it was noted that this is only possible when the Assistant is working as transportation support as this allows more time for the Transportation Officer to devote to monitoring and planning.

*Cost Sharing Mechanism*

Prior to 2006/2007, Northwest was charged a 4% administrative charge in addition to the Operator costs. This amount represented approximately what the Transportation Department spent on administration costs to deliver student transportation services. Starting in the 2006/2007 school year, the actual administrative charge will be split between Boards based on enrolment. The Boards are currently still in discussion as to whether this will be total enrolled students or only transported students. Operator costs are split based on an unweighted transported student basis. This count includes courtesy riders.

*Staffing and Administration*

As mentioned, the Transportation Department has a limited number of personnel assigned to it. Despite this limited staffing, a group of employees have been cross trained in using the EDULOG system and are informed of how to make tactical management decisions in the event that the Transportation Officer leaves or is sick. As an employee of Rainy River, the Transportation Officer can participate in Board wide training sessions and access outside workshops on communication skills.

In order to meet other managerial and administrative requirements, the Transportation Department has a service purchase agreement with EDULOG for software support. Other support services such as IT, HR and accounting are provided by Rainy River at no charge to the transportation budget.

*Insurance*

Insurance requirements for the Transportation Department are addressed as part of Rainy River's policy with the Ontario School Boards' Insurance Exchange. Additionally, all Operators have insurance in place. Some Operators name Rainy River directly in their policies. Going forward, the SBO at Rainy River has indicated they will request that all Operators name both Rainy River and Northwest in their insurance policy.

### 3.4.2 Best Practices

It is recognized that the Transportation Department has demonstrated a best practice in the following area:

- The Transportation Department has provided EDULOG training to multiple staff as back up to the Transportation Officer. This is important as the EDULOG system is critical to the Transportation Department operations and having multiple trained employees is a prudent practice.

### 3.4.3 Recommendations

*Consortium Agreement*

It is recommended that the Transportation Department formalize a Consortium Agreement to ensure that the terms of service are mutually agreed upon and formally documented by the Partner Boards. Establishment of the Consortium Agreement should also include documentation of the dispute resolution policy that will continue to be utilized when the Consortium is formally established. The

dispute resolution policy should cover disputes between Partner Boards and between the Consortium and other stakeholders (i.e. Operators , parents, and schools).

*Service Purchasing Boards*

The Transportation Department should establish formal contracts with all Service Purchasing Boards (both Northwest and the Area First Nations) as soon as possible. Formal contracts protect the Consortium by ensuring that scope of services and fees, insurance / liabilities, quality of service, dispute resolutions and term are clearly articulated and agreed upon prior to the delivery of service. Without a contract in place, there is a higher risk that disputes could arise over misunderstandings.

*Operational Plans*

The Transportation Department has made positive progress in identifying short term efficiency goals and a long term goal of operating with a balanced transportation budget. The Transportation Department, with oversight from the Management and Academic Committees, should develop a formalized operational plan with clearly identified steps that the Consortium will take to achieve both short term and long term goals. Strategic elements of service delivery such as changes to loading procedures, school bell times, and pick up locations should be considered and documented. A sound operational plan will not only formally identify goals and objectives for the Consortium, it will also describe how these goals and objectives will be achieved and allow the Consortium to measure its performance against tangible steps and stages of progress.

*Support Services*

It is recommended that Rainy River, along with the Northwest, revisit their provision of support services to ensure it is equitable and fairly captured as an administrative and operational cost of providing student transportation. In particular, these expenses would include accounting, payroll administrative costs, IT support, HR support, insurance and superintendents' time (both Rainy River and Northwest). By not allocating a cost for these services to the transportation administrative budget, the true cost of providing transportation services is being understated. Additionally, these actual expenses are not being charged to Northwest and therefore true administrative costs may not be fully recovered.

*Insurance*

The Transportation Department has appropriate insurance in place through Rainy River and some of their Operators have named Rainy River in their own policies. This ensures that liabilities are appropriately covered. It would be recommended however that the Transportation Department ensure all Operators have named both Rainy River and Northwest as insured.

## 3.5 Financial Management

A sound financial management process ensures the integrity and accuracy of financial information. This includes the internal controls that exist in the accounting process and ensuring that a robust budgeting process is in place which provides for accountability in decision making. This section will also review past financial performance of the Consortium over a minimum of 3 years to gain an understanding of any major variances year over year with the goal of understanding what decisions the Consortium has made which have either increased or decreased transportation expenditures.

### 3.5.1 Observations

*Accounting*

The accounting function is performed by Rainy River. Since the Transportation Department is a department within Rainy River, the accounting processes and policies used by the Board are in place for all transportation expenses and revenues. Given that the Transportation Department is not an independent, legal entity it does not have any specific reporting requirements. However, the Rainy River Board as a whole is subject to audit requirements of which, transportation expenditures are included.

*Processing Payables*

Operators do not submit invoices to the Transportation Department. The Accountant, based on the current contracted rates, will determine the monthly amount payable to each Operator based on route information provided by the Transportation Officer. As the Accountant prepares the monthly disbursement material, the data is reviewed for reasonableness to the annual contract rate and the previous months payment. The Accountant will send the summary, organized by Operator, to the Purchasing Payable Clerk for processing. The Purchasing Payable Clerk will create a batch accounts payable report which is approved by the SBO at Rainy River prior to any disbursements being made.

*Budget Planning*

The Transportation Department budget is determined as part of Rainy River's overall board budget. The transportation expenses consist mainly of Operator costs. The administrative costs are budgeted based on expected salaries of staff. The Transportation Department also budgets small amounts of administrative costs for training and other miscellaneous expenses. Operator costs are budgeted based on the negotiated contract rates with Operators. The contract negotiation process generally takes place from April to June for the following year. The budgeted costs are then included in the Board's budget in June/July with final approval from the Board occurring in August. Once the costs have been approved by Rainy River, the SBO at Rainy River will provide the SBO at Northwest with their estimated portion of total costs to be included in Northwest's budget.

*Budget Monitoring*

On a quarterly basis, the SBO at Rainy River will prepare an analysis of actual to budget expenses for the Board's budget as a whole. This analysis is presented to Rainy River's finance committee for approval. All significant variances are explained. The Transportation expenses are one line item within the analysis. Northwest is responsible for preparing its own variance analysis based on invoices received from the Transportation Department.

*Financial Performance Review*

The E&E Review Team has reviewed the transportation expenditures over the past 3 years for both Rainy River and Northwest. Our observations are listed below.

<u>Rainy River</u>

Administrative Expenses: Total administrative expenses have remained fairly consistent from 2003/2004 to 2005/2006 with an increase in salaries in 2005/2006 as a result of the addition of the Transportation Officer's Assistant.

Home to School Transportation: Regular home to school expenses have increased consistently by approximately 5% per year. Increase is due to regular Operator rate increases which are negotiated annually of 2-3% plus the replacement of the aging bus fleet. In 2003/04, Rainy River changed their policy regarding pick up of SK children to match Northwest's policy of door-to-door pickup. This had the effect of increasing costs. The Rainy River board provides late busing to its secondary students only, total cost is minimal at 1% of total home to school expenses. From 2004/05 to 2005/06 Rainy River eligible riders increased by approximately 3% due to the consolidation of four schools into one.

<u>Northwest</u>

Administrative Expenses: Northwest (prior to 2006/2007) was charged an administrative fee of 4% of total costs. This represented the estimated cost to Rainy River of providing student transportation services.

Home to School Transportation: Northwest pays for regular home to school service for students at the elementary school level only, as there are no Catholic secondary schools in the district. For the most part, policies are harmonized (see section 4.2). Increases in home to school costs for this Board have been due to a base increase in Operator costs.

### 3.5.2 Best Practices

It is recognized that the Transportation Department has demonstrated best practices in the following areas:

- Appropriate controls over financial accounting are in place at Rainy River. This is important to ensure assets are safeguarded and only valid expenses are paid; and
- A budgeting process is in place at Rainy River which ensures timely completion and appropriate approval of budgets as well as ongoing monitoring of actual expenses including transportation costs.

## 3.6 Results of E&E Review

Consortium management has been assessed as moderate–low. The Transportation Department has made great strides to look for efficiencies in their operations. The Transportation Officer has prepared a report detailing specific areas where future efficiencies can be gained and many informal practices, such as the way in which the SBOs from each Partner Board communicate and work together for the benefit of the Transportation Department, have been established. In order to ensure transparency and the continued improvement of operations, these processes and plans should be documented.

In order to become more effective under Consortium Management, the Transportation Department should formalize its agreement with Northwest and other Service Purchasing entities and move forward with its Consortium Plan to formalize the Management and Academic Committees. This would allow the Transportation Department to quickly move to a higher rating. Although in practice the Transportation Department may be operating effectively, without the formalization of agreements and processes, there is a risk that this cooperation may be jeopardized at some point in the future.

# 4. Policies and Practices

## 4.1 Introduction

The policies and practices review area focuses on the Consortium and Partner Board's transportation policies that are in place as well as how they translate into practice on the ground. The analysis will focus on three key areas:

- Transportation Policies;
- Route Planning;
- Safety Programs; and
- Special Needs and Specialized Programs.

Each component has been analysed based on observations from fact (including interviews), together with an assessment of best practices leading to a set of recommendations. These results are then used to develop an overall E&E assessment of Policies and Practices as shown below:

| **Policies and Practices – E&E Rating:** | **Moderate** |
|---|---|

## 4.2 Transportation Policies

Transportation planning policies establish the foundation for the provision of transportation services and establish the parameters for the overall effectiveness and efficiency of the system. The key areas of assessment in this section are the completeness of established policies and the degree of policy harmonization between the Boards.

### 4.2.1 Observations

*Policy Infrastructure*

Transportation policies form the foundation of the operating structure of every transportation operation because they establish the constraints under which all planning and service delivery must occur. The goal is to synchronize policies and operations in such a manner that service can be maximized and resources can be minimized. In Rainy River, policies are generally harmonized between the Boards and are designed to provide a high level of service to students and parents. The provisions allowing alternate bus stops, home stops in rural areas, courtesy riders, and late bussing are designed to be accommodating but do not minimize the cost of providing transportation.

Exceptions to the Rainy River policies occur in the Atikokan area. Specifically, the provision of noon hour transportation in Atikokan is inconsistent with the practices in the rest of the Board's jurisdiction. The unique geographic isolation of the community and the desire to provide services similar to the coterminous School Authority have led to the continued provision of this service.

*Communication*

An important aspect of communication is a Driver's ability to communicate with a dispatcher in case any sort of issue arises inside or outside the bus. These issues could include accidents, behaviour incidents, missing children, or medical emergencies. Operators provide for this type of communication in multiple ways. Larger Operators often operate a centralized dispatch station that all of their Drivers can contact in case of emergency; smaller Operators can implement processes such as jointly hiring a dispatch person or working with a dispatch person at a school or school board. In the Rainy River district, there are multiple forms of communication between buses and dispatchers. Additionally, there is a possibility that some bus routes may not have consistent access to dispatch-type communications, especially later in the day after schools have closed.

For home to school transportation, parents are provided a 'no-bus sign', which, when put in home windows identifies to the Driver that their child will not be requiring transportation. Students, by policy, need to be at the bus stop several minutes ahead of time, this sign is a courtesy for the Driver

on door-to-door service. For permanent cancellations to student service, parents notify the school, and the school faxes a notice of cancellation to the Transportation Department.

Each Driver at all times carries a list of all transported students in their vehicle. Drivers are responsible to maintain accurate lists, update them as needed and distribute information to the Transportation Department. They maintain accurate duplicate lists in a central location. Schools shall have on file lists of students transported on all regular home to school routes. Master lists of all students on bus routes should be kept at the Transportation Department (see section 5.2).

*Transfer points*

Transfer runs are used extensively as a routing strategy, but a formal policy on the maximum number of transfers per student and when transfers will be used have not been established. In practice, only secondary students transfer and there is a maximum of 2 transfers per trip. All transfer points are supervised, and are performed from bus to bus to ensure student safety and minimize the potential for confusion.

*Hazards*

Hazard boundaries are typically established due to railroad and highway crossings. Some hazards are dealt with on an individual basis, and are coded as such. The Director of Education must approve hazards before they are established.

### 4.2.2 Recommendations

*Policy Infrastructure*

Locating bus stops in front of the homes of rural students can be an effective practice when students live on sparsely populated, yet accessible roads. However, requiring a bus to drive down dead-end roads or make exceptional stops increases the length of the bus route and the time that students spend on the bus. Thus, it is recommended that the Board implement a home to stop walking distance for rural students. This would maximize the opportunity to establish congregated rural bus stops, where feasible, and thus increase routing efficiency.

*Communication*

At this time, there is a possibility that some bus routes may not have consistent access to dispatch-type communications, especially later in the day after schools have closed. The Transportation Department should work with Operators to ensure that every bus can contact some sort of dispatch person for the duration of the time that the buses are on the road. Due to the unique local Operator market and geographical issues, the Board and the Operators may have to use multiple methods of communication (e.g. joint operator dispatchers; dispatchers at schools or the transportation office; cellular or satellite phones) to ensure that all routes are adequately covered.

*Transfer points*

The Board currently uses transfer points in a safe and effective way for secondary students, although no formal policy on transfer points is in place. The policy on transfers should be formally documented and then consideration should be given to expanding the policy to all students rather than just secondary grades.

## 4.3 Route Planning

The ability to maximize the use of each school bus is the foundation of effective and efficient transportation services. Proper consideration of all of the elements required to deliver high quality and cost effective services can only occur if the transportation operation has established a planning cycle that is sufficiently forward looking. During the planning cycle, transportation managers are constantly trying to strike a balance between two opposing constraints, time required and distance to be travelled, to maximize asset utilization.

### 4.3.1 Observations

*Planning Cycle*

The Transportation Department attempts to develop and distribute routes early enough for the Operators to perform dry runs before the start of school and provide input on possible changes prior to the start of the school year. However, in practice this does not always happen and the result is that significant efforts must be made in September to rebalance and redesign routes after school is open and feedback can be received. If a route is being redesigned, the Operator receives the information to provide feedback and to ensure the route will operate effectively, prior to the implementation.

The route audit completed in the 2005-2006 school year was part of an effort to improve the planning and management of routes. However, a concern exists that when Drivers make manual changes to a route and report them to their Operator, the Transportation Department does not always receive these changes. This existing process is currently being examined to ensure all parties recognize the rationale for and the importance of maintaining complete, accurate, and current student lists.

*Routing*

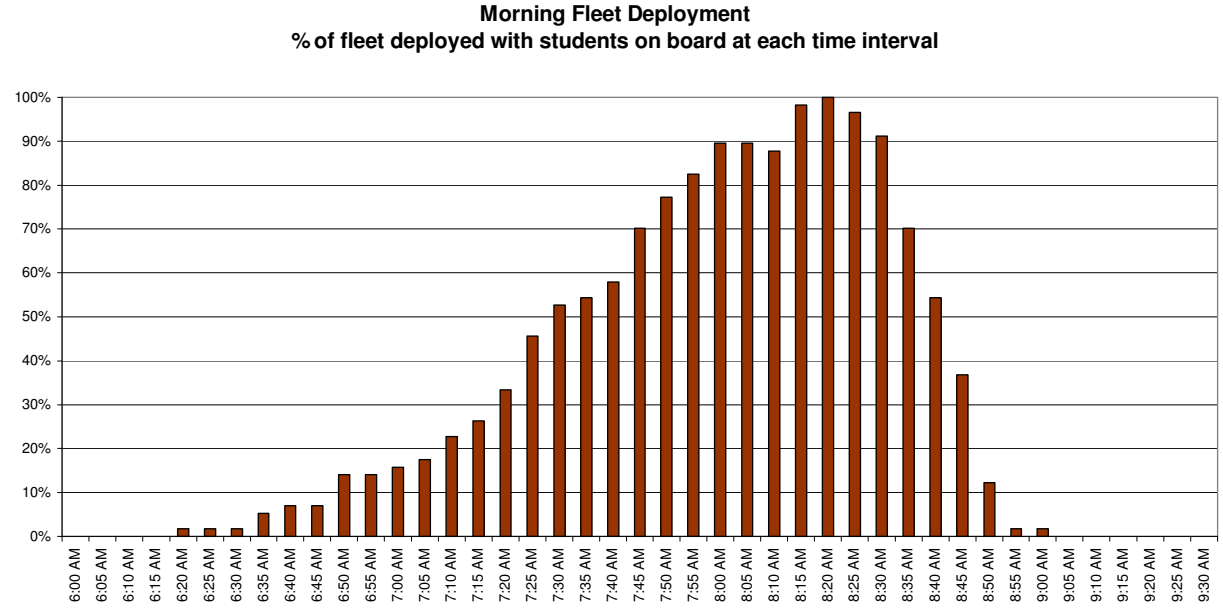
The Transportation Department has two Operators under contract who operate more than three buses each. The majority of Operators are single bus contractors. These contractors generally have long-standing and geographically-based relationships with specific routes. There is not much flexibility nor options in assigning buses to routes. Indeed, in some cases it appears as if route design must sometimes be influenced by bus location and availability, rather than the reverse. Nevertheless, several opportunities to improve overall route efficiency were identified in the route analysis, although realizing that these opportunities would require changes in assumptions regarding service delivery policies and bell times. For example, a visual examination of sample routes on the EDULOG system revealed the significant impact that home stops have on individual runs. Requiring that all students in rural areas be provided with door-to-door service requires that some buses follow convoluted street paths, with extra kilometres driven and awkward dead-end turnaround requirements. This increases the length of these runs, in some cases quite substantially, thus further limiting opportunities for efficiencies.

The Transportation Officer is wholly responsible for maintaining the system of routes and schedules. Changes to the routing solution are made on an as-needed or as-noticed basis. The rural character of the system results in many low-density routes where the addition or deletion of a single student can radically alter the route and/or cause the adjustment of several contiguous routes. These sorts of modifications are made as-needed to maintain overall system efficiency. Other changes are made on an opportunistic basis as they are either noticed by, or brought to the attention of, the Transportation Officer. Additionally, the Transportation Department executes an annual modification process whereby the entire system is reviewed in the context of the approaching school year, and the changes brought about by student grade promotion, etc.

Generally, the goal of every student transportation program should be to fill each bus run, and then to use the same bus as many times as possible over the course of the day. Achieving this dual goal, or finding the optimal balance between the two, leads to efficient overall route systems. In the Transportation Department, just 8 of 58 buses have morning or afternoon routes that include more than a single run. Of these, just two buses have routes with more than two morning or afternoon runs. Overall, the Transportation Department is a single tier system with all schools starting and ending at much the same times. This precludes the extensive use of run pairing. Relatively high levels of bus capacity utilization are achieved on runs by combining students from multiple schools onto a single bus, with average run capacity utilization of near 70% of rated bus capacity. This is an excellent result in a rural system such as this. However, overall efficiency is negatively impacted by the low level of asset utilization, as measured by the excessive number of single tier buses. On average, each bus in the fleet only operates for 2 hours and 21 minutes over the course of the day with students on board.

The strategy pursued by this Transportation Department is to maximize run capacity utilization (fill the bus), at the expense of overall asset utilization (reuse the bus). This is illustrated by the route statistics table, and the morning and afternoon fleet deployment illustrations below.

| Route Statistics | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Daily Run Count by Bus | AM Start Time | AM End Time | PM Start Time | PM End Time | AM Ride Time | PM Ride Time | Kilometers | Assigned Load | Capacity Utilization | Count of schools served | Count of Stops | Combination |
| Average | 2.3 | 7:35 AM | 8:35 AM | 3:09 PM | 4:11 PM | 1:00 | 1:01 | 39.5 | 37.5 | 69% | 2.4 | 20 | 67% |
| Total | 134 | | | | | | | 5,290 | 2,477 | | | | 89 |
| Min | 1 | 6:20 AM | 8:00 AM | 2:54 PM | 3:10 PM | 0:08 | 0:06 | 3.0 | 6.0 | 20% | 1.0 | 2.0 | |
| Max | 7 | 8:38 AM | 9:00 AM | 3:45 PM | 6:01 PM | 2:20 | 3:07 | 109.8 | 173.0 | 143% | 7.0 | 62.0 | |




Given the geographic limitations imposed on the ability to pair runs effectively, the current routing strategy represents a reasonable approach. There is, however, very little balance between the dual goals of filling and reusing each bus. Our analysis indicates that there may be opportunities to reuse buses more effectively. In particular, there are examples of primary schools in the outlying regions around Fort Frances that are currently served exclusively or primarily by dedicated (non-combination) runs. These include Nestor Falls (2 dedicated runs), McCrosson/Tovell (4 dedicated runs), and Crossroads School (5 dedicated out of 8 total runs). Modifications in two primarily policy driven areas – bell times and levels of service – could facilitate further efficiency improvements that retain high levels of capacity utilization while increasing trip pairing opportunities. Bell time offsets for certain schools would be needed, and certain policies (such as enabling house stops for all students in rural areas) that extend the length of individual runs would have to be reconsidered.

*Bell Times*

As discussed above and illustrated by the fleet deployment chart, all schools are kept on what is essentially a single bell schedule. Thus all students arriving from outlying rural areas are brought in on common buses, which make multiple stops in accordance with the small time offsets between the primary and secondary schools in town. Primary schools in outlying areas are geographically dispersed, with resulting single morning and afternoon runs serving these schools without any current additional pairing opportunities. Establishing targeted bell time offsets might enable further pairing opportunities, as discussed in the Routing section above.

### 4.3.2 Best Practices

It is recognized that the Transportation Department has demonstrated a best practice in the following area:

- The Transportation Department has implemented a number of routing strategies that consider the low density, rural character of the service area and achieve high levels of overall bus run capacity utilization. Given the large geographic area that must be serviced a focus on maximizing the number of students being picked up from a given area in order to minimize the impact of deadhead travel is reasonable and appropriate.

### 4.3.3 Recommendations

*Bell Times*

Additional analysis and consideration of policy and bell time alternatives is recommended for the purpose of identifying opportunities for improving asset utilization without negatively impacting run capacity utilization in the route scheme.

## 4.4 Safety Policy

The safety of transported students is paramount in any school transportation system. Developing a culture of safety requires that transportation personnel work closely with students, schools, service providers, and the community to establish specialized programs targeted to the needs of each specific group. Additionally, Driver training and student management procedures must be aligned to reinforce behaviour expectations and consequences for failure to comply with the expectations.

### 4.4.1 Observations

*Driver Training*

All Drivers are required thorough their Operator contracts to be trained in first aid and the use of epipens. Drivers who transport students with special needs take additional specialized training.

*Student Training*

The Consortium has established a safety training program for students that is designed to introduce safety as an important element early in a student's tenure and reinforce the message throughout their time in school. Working in conjunction with the Operators, the 'First Rider' program is offered to all kindergarten students, and is designed to introduce both the students and parents to school bus safety rules. This training consists of a safety video, a review of school safety procedures and a ride on a school bus. The Transportation Department also organizes annual activities for bus safety week at the schools. These activities include bus evacuation drills, with a bus being provided by Operators at a minimum field trip rate. Other activities include a safety video, and a review of school/bus safety procedures.

### 4.4.2 Best Practices

It is recognized that the Transportation Department has demonstrated a best practice in the following area:

- Safety is emphasized as a contractual requirement with Operators and with students through the First Rider program and bus safety week activities. Establishing and emphasizing a culture of safety is a key responsibility of all transportation operations.

## 4.5 Special Needs and Specialized Programs

Effective school transportation includes transporting students with special needs (mobility restrictions or behavioural issues due to cognitive conditions, attachment requirements and such) as well as transportation to specialized programs, which often involves transporting students from diverse locations to centralized program schools. Both of these types of transportation can put pressure on the efficiency of the system since they involve longer distances, lower demand densities, longer passenger dwell times, and in the case of special needs transportation, accessible vehicles.

Transportation consortia face a challenge in maximizing the efficiency of these systems in addition to attempts to integrate students and avoid having separate transportation systems. This section examines the policy approach to special needs and specialized transportation, and how well practice conforms to established policies.

### 4.5.1 Observations

*Placement of Magnet Schools/Special Education Programs*

The Board administration determines the location of programs for special education and which programs and schools are deemed as magnet-type facilities. Magnet programs are implemented to meet the needs of the immediate community, with the integration of special education and magnet

programs in the classroom in rural areas. Home-to-school transportation is provided once students are registered in these programs. This is an effective and efficient method of accommodating these specialized trips.

*Eligibility for special needs transportation*

Special needs transportation is provided to students who have a medically verified condition and is ultimately determined by the Board's Special Education Department and the school principal. Transportation arrangements are made in consultation with the Transportation Department regarding the type of vehicle and restraints that may be required. Students who are in Living and Learning self-contained special education programs are provided service as courtesy students and are coded in EDULOG as special needs, and will be shown as being out of the attendance area.

*Public Specialized Transit*

Students with specialized mobility needs are provided service using contracted accessible handi-van vehicles. Trips in Fort Frances are efficient at a cost of $5 per trip. All but one student with special needs are currently accommodated using handi-van vehicles. The same Drivers are used daily which increases the level of service by providing a consistent service with a better understanding of the student's needs. Students are provided ride-alone door-to-door service. The Transportation Department does not provide specialized training to these Drivers.

### 4.5.2 Best Practices

It is recognized that the Transportation Department has demonstrated best practices in the following areas:

- Inclusion of the Transportation Department in the decision-making process for mode of transport ensures that all modes and methods of providing services can be evaluated. In addition, inclusion allows for discussion about how to maximize service delivery to students with special requirements without significantly disrupting other aspects of the routing network; and
- Specialized transportation for students with special needs is provided using efficient, contracted services, where appropriate.

## 4.6 Results of E&E Review

Rainy River was rated as moderate in the area of policies and practices. Most policies are harmonized and practices generally follow policy. Rainy River operates a service that effectively addresses student needs while understanding the constraints of the local environment. Resources are allocated in an efficient manner, realizing the limited resources available to plan and monitor routes. In order to improve its rating, Rainy River should harmonize all policies for all regions (with a particular focus on rural walk to bus stop distances) and examine opportunities to alter bell times to increase routing efficiency.

# 5. Routing and Technology

## 5.1 Introduction

Routing and Technology encompasses the management, administration, and use of technology for the purpose of student transportation management. The following analysis stems from a review of the five key components of:

- Software and Technology Use;
- Digital Map and Student Database Management;
- System Setup and Use;
- System Reporting; and
- Special Needs Transportation Planning and Routing.

Each component has been analysed based on observations from fact (including interviews) together with an assessment of best practices leading to a set of recommendations. These results are then used to develop an E&E assessment for each component, which is then summarized to determine an E&E assessment of Routing and Technical efficiency as shown below:

| Routing and Technology – E&E Rating: | Moderate |
|---|---|

## 5.2 Software and Technology Use

Modern student transportation routing systems allow transportation managers to make more effective use of the resources at their disposal. These systems allow for improvements in the management and administration of large volumes of student and route data. However, the systems must be fully implemented with well designed coding structures and effective mechanisms to extract and report data to all stakeholder groups. This section of the evaluation was designed to evaluate the baseline acquisition, setup, installation, and management of transportation-related software.

### 5.2.1 Observations

*Routing Software*

EDULOG has been in use at Rainy River since 1993. They switched from the DOS to the NT version in 2002, and are currently operating version 10.1. They do not have the most recent version of the software installed. EDULOG is installed on the Transportation Officer's desktop computer, which doubles as the system server, and is accessible from one additional workstation within the Transportation Officer's office. No other system access, local or remote, is provided.

EDULOG is a fully functional, fully capable system with a long history of successful use in the Rainy River. While the level of sophistication in its use is relatively low when compared to other consortia, the importance of establishing an appropriate comparison basis must be recognized. Currently, the Transportation Department is effectively a one-person operation, with casual (i.e., not permanently assigned) assistance as required. There is no need for a more refined infrastructure unless the program itself becomes more refined and more focused on "pushing" information out to users. Considering the rural, low-density service area, the Transportation Department has done an effective job of implementing and utilizing an inherently complex routing software package.

*Maintenance and Service Agreements*

Software maintenance and support is extremely limited. Technical support is provided by Rainy River for hardware maintenance, troubleshooting, and database backup. A daily backup of EDULOG data is performed each night, and hardware support is provided via the Rainy River IT department, with excellent responsiveness reported by the Transportation Officer. Software maintenance and support is provided via the software vendor on a demand/response basis. No software upgrades or patches to the software are installed on a regular basis.

*Distributing Data*

The only regular reporting from the EDULOG system is the generation of summary and detailed route reports. These are disseminated to Operators and Partner Boards for their use, and also serve as a primary feedback mechanism to the Transportation Officer for the correction of problems, etc. There is no other regular reporting for oversight or analytical purposes. Specialized reports are generated on-demand for specific purposes, such as completing the Ministry's annual survey. Generally, these are created as customized reports from the system.

The Transportation Officer is a competent user of the report generation functionality of the system, and was able to easily construct several reports for the E&E Review Team's analytical purposes during the interview process. Reports are routinely generated both in hard copy and as data exports to standard productivity software, primarily Microsoft *Excel*. This capability is crucial for this Transportation Department primarily because of the current need to maintain two completely separate EDULOG databases, as discussed below. In order to construct consolidated Transportation Department-wide reports, the Transportation Officer must export data from each database into *Excel* and manipulate it there. This skill and functionality is currently used primarily for report generation purposes, not to conduct routing analyses or for performance measurement. There is no performance measurement program currently in place.

Other than the productivity software discussed above, there are no other related software applications being used to assist the Transportation Department, schools, Operators, Drivers, and parents regarding transportation services. This is a significant weakness as it applies to communication and transfer of information among the various transportation stakeholders. Information dissemination is limited to the printing and distribution of summary and detailed route reports to Operators and schools. All other information flow is via voice and fax.

*Training*

Software users are very competent, particularly when the limited amount of technical and system training is considered. Minimal (one week) formal training was originally provided when the system was implemented in 2002. Small scale training efforts including attendance at one user conference have also been provided during 2005. The Receptionist has also attended the user conference as a training session in 2006. Nevertheless, it is clear that the users navigate the system with ease, use the system's graphic and tabular data to evaluate and enhance route efficiency, and are able to generate standard and demand-based reports easily.

### 5.2.2 Best Practices

It is recognized that the Transportation Department has demonstrated best practices in the following areas:

- The use of a fully implemented and functional transportation software application that allows for the review and management of routing schemes; and
- The Transportation Department has developed a rational process for backup and data recovery despite limited availability of on-site technical support.

### 5.2.3 Recommendations

*Training*

EDULOG is an advanced software product that offers capabilities beyond the needs of this Transportation Department site. That said, the investments already made, financial and otherwise, should now be leveraged to maintain and improve the use of this system rather than replacing it with another. The Transportation Officer is capable and efficient, but would benefit from additional analytical training to supplement her basic EDULOG knowledge. An investment in high-level user training would yield benefits to this Transportation Department. This training should focus on how to establish and utilize system coding for analytical purposes. Concurrent with this should be more in-depth training on EDULOG functionality, particularly as it applies to the management of shuttle, transfer, and combination routes which are utilized in abundance in the Transportation Department. It is currently difficult to analyze and manage these because of the manner in which they are coded within the system. Additionally, the Transportation Department should immediately move away from the legacy alpha-based route coding structure in favour of consolidation on the EDULOG numeric route numbers already resident within the database. (see further discussion in sections that follow).

*Distributing Data*

Consider the implementation of expanded information dissemination and / or interactive access tools to improve the quantity and timeliness of transportation information available to key stakeholders (school administrators, parents, students). Possibilities include a regular program of reporting and dissemination via mail, email, etc. or the implementation of web-based tools that facilitate remote read-only access to the transportation database. The Transportation Department should, however, rationalize the advantages of better and more timely information flow against the cost and time investment required. It would be difficult for the Transportation Officer to assume this added responsibility without additional (and costly) assigned personnel.

## 5.3 Digital Map and Student Database Management

This aspect of the E&E Review was designed to evaluate the processes and procedures in place to update and maintain the student data and map data that forms the foundation of any student transportation routing system.

### 5.3.1 Observations

*Digital Map*

Two maps were established when the NT version of EDULOG was originally installed in 2002. One covers the Eastern (Atikokan) area, and one covers the Western (Fort Frances / Rainy River) area. The rationale for establishing the two maps versus one is not clear, but it has been functionally adequate because the two areas effectively operate independently of each other for transportation purposes. There is a significant (150km or more) separation, and no sharing of buses or students between the two areas. The primary downside of this setup is that there must also be two underlying databases to support the two maps. This causes the Transportation Officer to "toggle" between the two and, more importantly, to combine data for reporting and analysis from the two databases in outside programs (e.g., Excel). This makes comprehensive analysis of the entire Transportation Department area more difficult. Combined, the two maps do cover the entire service area, if not the entire geographic area within the jurisdiction of the Transportation Department.

*Map Management*

Since their initial installation the maps in use have only been modified on rare occasions, such as to manually insert a turnaround location at the end of a road segment in order to facilitate accurate route development. While there have not been significant changes to the road network, other key map attributes such as running speeds on road segments, have been left unchanged requiring work-arounds such as manual intervention on route times. The Transportation Officer reports that 95 percent of the map contains valid addressing. Students in the other 5 percent have been "digitized", or manually located on the map. The rural character of the service area is the primary determinant in the absence of complete addressing. A report generated during the review indicated only two students unmatched to the map from an enrolled population of approximately 3,250.

*Default Values*

Due to a combination of limited resources and required skill sets, all of the key system and map values remain at their original system defaults and have been left unchanged and unmodified from when the original maps were established.

*Map Accuracy*

The maps are not calibrated to bus travel speed. Hazardous areas are noted on the maps through the use of boundary plotting. Beginning with the already established walk zone boundaries, the Transportation Officer plots hazardous walk areas within these walk zones. All students falling within the zone and otherwise eligible to walk are automatically assigned a hazardous rider eligibility code. This is the only such coding in use - no other hazards are coded within the system.

*Data Management*

There is no direct link between the Student Information Systems (SIS) and EDULOG. All student data in EDULOG is hand entered. At no point since implementation of the current software version in 2002 has there been a comprehensive download of student data. Thus, the EDULOG databases operate independently from any other. Address data is manipulated manually in order to achieve a match to

the map, and inconsistencies with the SIS are irrelevant from a system and transportation operation perspective. The Transportation Officer does communicate address problems to the school secretaries who are responsible for data entry into the SIS. Whether this results in a subsequent manual synchronization between the two databases is unknown.

Two manual processes are documented and followed that compensate for the absence of a direct link between the SIS and EDULOG. Annual updates are handled first by the Transportation Department. An internal rollover is done within EDULOG for the purpose of planning and updating routes for the next school year. Per the Transportation Department's written procedure statement, each school receives a revised transportation list at the start of the school year. Each secretary is responsible for reviewing this information and returning changes to transportation by October 1st. During the balance of the school year, an exception-based process is followed that includes the submission of a "Student Transportation Information" form from the school to transportation. This form is generally used for adding new students. Changes are typically discovered through operations, updated by transportation staff in EDULOG, and forwarded to the school for further action within the SIS.

*Coding Structures*

This is a significant area of weakness in the setup and use of the system. A short list of rider eligibility codes, plus a logical school coding structure, are the only two key elements used to categorize, organize, and analyze routes. Status codes for three categories of students (Catholic, First Nation, and wheelchair), plus special needs and courtesy flags for these students represent the only other system level coding in use. This severely limits the overall utility of the system for analysis and data accumulation, as discussed further below. A final weakness is a reliance on an outdated legacy route naming convention that assigns an alpha-based route name to routes. These are assigned outside of the numeric-based EDULOG route number, and are not resident within the system. This creates the need for an awkward cross-referencing process each time a route is reviewed and analyzed, as all routes are commonly known by their alpha, not EDULOG, route name.

The finding regarding basic system coding is consistent with the overall assessment of a minimalist, though effective, use of the routing software. An expanded use of this coding may produce a more effective and efficient system overall. However, this benefit may be marginal, and may not prove to be beneficial when weighed against the extra cost and effort required to implement and maintain this level of coding. These costs would include additional training for the Transportation Officer, plus (possibly) additional staffing resources for establishing and maintaining the system codes plus conducting the associated analyses. Transportation Department management must weigh the potential benefits and costs, utilizing local knowledge relative to the impact such an effort would have on the ability to maintain efficient and safe service delivery.

### 5.3.2 Recommendations

*Map Management*

The Transportation Department should explore the possibility of developing a combined map and database to simplify and improve reporting processes, and to facilitate expanded information dissemination, as discussed above. Further training and, potentially, outside support is required to improve map maintenance skills in the Transportation Department. The manner in which the system is currently used has kept this from becoming a larger issue, but many of the recommendations in the routing area cannot be successfully implemented without a more robust approach to map optimization and maintenance.

*Data Management*

A direct, coded link to the SIS is an essential and required element in successfully managing a transportation system. This must be established within the Transportation Department. With this, a regular process of downloads (full, rollover, adds/changes/deletes) should also be implemented. This is a significant weakness in the current program that should be rectified with the development of a robust link between the two databases. Establishing and maintaining an electronic link and management process to synchronize the Student Information System and Transportation Management Information System student database is a critical building block for a successful transportation system and a useful computerized routing system.

## 5.4 System Setup and Use

The goal of every organization that acquires transportation software is to use it to better manage the vehicles and students within their charge. Accomplishing this requires an understanding of the functionality of the software and how it can support the administration of existing operations and the evaluation of new and different approaches that may reduce cost or improve service. This aspect of the review was designed to evaluate staff competencies using the software, the use and understanding of ancillary modules or third party tools, and whether the functionality of the chosen application is used to improve effectiveness and/or efficiency.

### 5.4.1 Observations

*System Use*

As discussed above, the Transportation Officer is a very competent, but basic, user of the EDULOG system. Some consideration and investigation of the more advanced functionality of the system has begun, but this is still in its infancy and suffers from a lack of available time and training. Currently, the system is utilized primarily to visualize routes, and to access the tabular information available in standard and customized route reports to work on route optimization. Several examples were provided of recent successful efforts in this regard. The majority of system use for analysis is based on standard route reports, graphical review of route tracks on the map, and inherent experience-based knowledge of the system and its architecture. Nevertheless, a random review of several current bus runs illustrated opportunities for efficiency gains for service to one school. However, a review still needs to be completed to see the effect on the connecting transfer routes.

Combination runs (where one bus transports students to multiple schools) and transfer runs (where one student rides multiple buses to school), are not clearly identified in the system. This is a particular problem given the program's extensive, and largely effective, use of these as routing strategies. Numerous (indeed most) regular home-to-school bus runs are combinations, and many transfer runs exist within the system. The only way to identify combination runs is through an examination of multiple school destinations on route reports. Shuttle runs are only identifiable by their characteristics (e.g., short time, low number of stops, etc.). Transfers are identifiable only by the notation of "t" as a prefix to individual stop locations.

There is a flag (checkbox) in the student record to indicate courtesy riders. It was reported by the Transportation Officer that there are very few courtesy riders since a high percentage of the enrolled population falls within the eligibility criteria for transportation.

### 5.4.2 Recommendations

*System Use*

The Transportation Department should consider providing additional, regular training opportunities on system use. Additional training in analytical methodologies (as recommended above), combined with additional staffing resources to remove a portion of day to day operational responsibilities, would allow the Transportation Officer to focus more ongoing attention on strategic route optimization and analysis.

Establishing effective coding structures begins at system setup and requires a comprehensive understanding of what organization processes the software will be designed to support. As was mentioned, the Transportation Department makes extensive use of complex routing strategies including combination and transfer runs. However, these runs are not identified in the system. EDULOG has good management tools for specialty run types, such as shuttles and combinations. Taking advantage of EDULOG coding conventions would support basic operational analysis (such as calculating cost per bus by route type). The Transportation Department should consider, consistent with the observations in Section 5.3.1, modifying the coding schemes and processes to take better advantage of these capabilities.

## 5.5 System Reporting

Adequate reporting allows for the early identification of trends that may be detrimental to operations, improves the analytical capacity of the organization, and allows for internal and external stakeholders to be more adequately informed about operations. The purpose of this aspect of the review was to

evaluate what reports are typically generated, who receives these reports, and what capabilities exist to develop ad hoc reports.

### 5.5.1 Observations

*Reporting*

The only regular reporting from the EDULOG system is the generation of summary and detailed route reports. These are disseminated to Operators and Partner Boards for their use, and also serve as a primary feedback mechanism to the Transportation Officer for the correction of problems, etc. There is no other regular reporting for oversight or analytical purposes. Specialized reports are generated on-demand for specific purposes, such as completing the Ministry's annual survey. Generally, these are customized reports from the system. The Transportation Officer is a competent user of the report generation functionality of the system, and was able to easily construct several reports for our analytical purposes during the interview process. This skill could be expanded to encompass more detailed analysis of operations, including bell time and routing pairing analysis as discussed previously, with additional training.

### 5.5.2 Recommendations

*Reporting Schedule*

While it is unlikely that a small rural site, such as the Transportation Department, would require an extensive and robust reporting schedule, expansion of the existing demand-based reporting program could improve the quantity and timeliness of transportation information available to key stakeholders. Additionally, this expansion would provide the Transportation Officer with valuable training in more complex system functionality. A targeted program of basic reporting and performance measurement would ensure that all stakeholders are regularly made aware of transportation-related activities, their cost, and activities being undertaken to identify operational improvements.

## 5.6 Special Needs Transportation Planning and Routing

Special education presents unique challenges that often require operational strategies well outside the normal practices of any organization. This portion of the review was designed to evaluate the strategies and approaches used to provide transportation to special education students and the approaches used to minimize the cost and operational disruption associated with this type of transportation.

### 5.6.1 Observations

*Coding of Special Education Students*

Management of special education transportation is a significant weakness in the current program. While the small, rural character of the system, and concurrent close relationship between bus Driver and student, compensates in many ways for the absence of formal information sources and procedures, a potential operational exposure exists.

Special needs routes in this Transportation Department do not differ greatly in character from the general education routes for rural students in that door-to-door service is provided for all. As such, the planning of these routes is much the same as with regular education students. Special needs students are identified in the system with the only additional coding associated with that student record being a status code of "WC" for wheelchair required, as applicable. Additional relevant exceptionalities and requirements (special equipment, etc.) are handled on a case by case basis through verbal communication between the Rainy River special education coordinator, the Transportation Officer, and the Operators.

### 5.6.2 Recommendations

*Route Management*

Special education transportation, while generally limited as a percent of the total population transported, has a significant impact on total transportation costs and operational efficiency. Even in small rural operations it is necessary to ensure that these routes are actively managed and reviewed on a regular basis. Therefore, it is necessary for the Transportation Department to re-examine all

aspects of information management as it applies to special needs transportation. This would include improving EDULOG system coding, and Transportation Department policies, processes, and procedures to ensure that all special needs students are identified, tracked, and routed appropriately.

## 5.7 Results of E&E Review

Routing and Technology use has been rated as moderate. Staff have worked diligently to effectively implement and integrate EDULOG despite limited training and assistance. Despite the geographic challenges and limited availability of support, Rainy River has designed its routing scheme to ensure high bus capacity utilization, which is a reasonable and prudent approach in low density areas. The rural, low density nature of most routes in this area may preclude the effective use of optimization and other sophisticated tools. However, the Transportation Officer is a competent self-taught user of the system who, with a minimal investment in formal training, could develop into an expert user. We are confident that an investment in training would bear fruit in further routing efficiencies, even if the more sophisticated tools within EDULOG are never accessed.

The greatest level of effort should be placed on improving the management of special education student data. A review of all practices should be conducted to ensure that all exceptionalities, specialized equipment, and specialized training are properly documented in the student record. This is a key risk management strategy that ensures that operations can continue with minimal interruption if personnel or contractors change. Efforts also must be made to improve the integration of data from the Boards' student information systems with the routing software to allow for more timely and complete updates to student data which can be used to facilitate the analysis of alternative routing schemes. Following the improvements in student data management, the Transportation Officer should review the bell time schedule to determine if changes can be made to increase the emphasis on the reuse of assets without dramatically impacting the high level of capacity utilization being achieved currently.

# 6. Contracts

## 6.1 Introduction

Contracts refers to the processes and practices by which the Consortium enters into and manages its transportation service contracts. The analysis stems from a review of the following three key components of Contracting Practices:

- Contract Structure;
- Contract Negotiations; and
- Contract Management.

Each component has been analysed based on observations from fact (including interviews) together with an assessment of best practices leading to a set of recommendations. These results are then used to develop an E&E assessment for each component, which is then summarized to determine an E&E assessment of Contracting Practices as shown below:

| **Contracts – E&E Rating:** | **Moderate** |
|---|---|

## 6.2 Contract Structure

An effective transportation contract establishes a clear point of reference that defines the roles, requirements, and expectations of each party involved and details the compensation for providing the designated service. Effective contracts also provide penalties for failure to meet established service parameters and may provide incentives for exceeding service requirements. Contract analysis includes a review of the clauses contained in the contract, ensuring that the terms are clearly articulated and a review of the fee structure is conducted.

### 6.2.1 Observations

*Contract Clauses*

The Transportation Department has a standard contract in place which is used for all Operators in the area. The standard contract contains clauses related to the two year term of the agreement; rate negotiations; Operator requirements; safety training requirements (including all Drivers must have CRP/First aid and Epipen training); service requirements; termination; and payment terms. The payment term clause provides for some service level protection by allowing Rainy River to withhold payment on authorized route kilometres and restrictions on payments in the event of school closures. In the event of a school closure or cancellation, no payment will be made for fuel, variable maintenance and mileage/time not operated. Operators will be paid wages for up to 3 days of inclement weather. In order to facilitate communication, the Transportation Department provides Operators training on Epipen use and Board policies.

The contract also provides for replacing an Operator who wishes to remove a route or to stop providing service altogether. The potential remedies include allowing the Operator to transfer the route, termination of service, or reassignment. The Transportation Officer will review the route in question to ensure that it is still required and then the Board sends out a request for interest to all current Operators and other potential Operators. After interest has been received, the route is awarded based on a draw of eligible potential or existing Operators.

The contract stipulates a per diem rate per bus that consists of a fixed allowance, wage and benefit component, fuel component and variable maintenance component. The fixed allowance is based on a 10 year depreciation period, a fixed return on investment factor, and an amount for administrative costs such as license, insurance, MTO inspections, training, spare buses, and all radio related costs. The wage and benefit component includes a minimum 3.25 hour per day allowance with a possible premium for hours over 3.25. The fuel component is based on an average fuel economy of 2.9 kilometres per litre, with a minimum of 50 kilometres travelled each day. The payment is determined

monthly based on the lowest retail pump price in specified areas less GST and 2 cent per litre discount. Finally, there is a maintenance component paid on a per kilometre rate.

The above rate structure provides several benefits to the Transportation Department. It encourages the use of newer vehicles by providing an incentive in terms of a higher ROI and depreciation component. It also discourages Operators from providing service on longer routes as the per kilometre variable rate decreases after 160 kilometres travelled. Although this may not be completely under the control of Operators, it may encourage them to identify for the Transportation Department efficiencies in routing as it is not disadvantageous to the Operator to have a shorter route. One of the weaknesses of the above structure is that the Transportation Department is paying for "dead head" time. This is the time spent returning the bus from the last drop off to the first pick up. The Transportation Department pays both the Driver wage component and the variable per kilometre rate for this distance travelled.

### 6.2.2 Best Practices

It is recognized that the Transportation Department has demonstrated best practices in the following areas:

- The standard contract contains appropriate clauses covering all aspects of the Operators' arrangement with the Transportation Department. This ensures that all terms and requirements are understood by all parties and minimizes the potential for misunderstandings. Contracts are up to date and signed for all Operators ensuring they are legally binding; and
- The Transportation Department provides training on Epipen use and Board policies to local Operators. This not only ensures that Operators are up to date in terms of skills and knowledge of board policies but also ensures that the lines of communication are open between Operators and the Transportation Department. It provides an opportunity for issues and concerns to be raised and discussed as needed.

### 6.2.3 Recommendations

*Safety/Training*

Currently the Transportation Department is conducting regular training sessions for Operators. However, they are not monitoring compliance with safety training requirements by Driver/Operator. Although providing some of the training and stipulating requirements in the Operator contract is a positive first step, it is important to monitor compliance to ensure that the level of service and standards that are expected are actually being received. It is recommended that the Transportation Department track Operator compliance with safety and training requirements in a manner more consistent with their standard contract.

*Strike Pay*

The Transportation Department should include a clause in their standard contract which covers the amount of pay to be provided to Operators should a strike occur. Even if this appears to be an unlikely event, the clause should be in the contract to avoid negotiations when the situation arises.

*Fee Structure*

The Operator rate structure is such that the Transportation Department is paying both the Driver wages and the variable kilometre cost for the time and distance travelled by the Operators between the last drop off and first pick up for both the morning and evening routes. For some of the longest routes in the region, this may not be appropriate. If a Driver does not return to the point of the first pick up, and instead remains in the population centre near the school between the morning and afternoon runs, then payment of the deadhead kilometres may not be necessary, as the deadhead kilometres may not be driven. While it may be good practice to pay the Driver wage component for the deadhead time, it would be recommended that the practice of paying the variable per kilometre rate be examined to ensure that it is not paid when deadhead kilometres are not actually being driven.

## 6.3 Contract Negotiations

Contract negotiations are intended to provide an avenue by which the purchaser can ultimately obtain the best value for money for services purchased. The purchaser's goal is to obtain high quality service at market prices.

### 6.3.1 Observations

*Bus Operator Contracts*

The Operators who serve the area have generally done so for many years. The process of awarding contracts is not competitive as routes are awarded to Operators based on historical service. However, contracts are negotiated regularly between Rainy River and Northwest and the Operators through an Operator's Negotiation Committee. The efficiency of the negotiating process is greatly enhanced by the fact that the Negotiation Committee provides the SBOs with their submissions/requests for changes well in advance of the negotiations. The SBOs then have the opportunity to review the requests for changes in the contract as well as determine any changes they would like to propose ahead of the actual negotiation meeting. Once a contract has been agreed upon by the Negotiation Committee and the SBOs, it is brought back to Rainy River for approval. Signed contracts are in place between Rainy River and the Operators (Northwest does not enter into contracts with the Operators although is involved in negotiations). The SBO at Rainy River provides the Transportation Department with a summary of changes to the contracts as renegotiated with Operators. The most recent contracts were for the 2006/2007 and 2007/2008 school year.

*Parent Drivers*

Parents are paid to transport students in cases where the student lives in a remote area. The parent either gets paid to drive the child to the closest bus stop or to drive the student directly to school. The parent is paid the lesser of actual expenses (based on total kilometres driven multiplied by the Board's mileage rate) or maximum of $19.31 per day. There are no contracts in place with these parents, no verification is performed on their license status, insurance, etc.

*Other*

The Transportation Department uses handi-vans for special needs transportation based on a flat rate per trip. Rainy River does not negotiate rates for handi-van services as there are no other services providers available in the communities being served. When the Board uses the handi-van Operators, it is the only way that the Board can provide home to school service. There are 13 students in total that require this service. Parents and principals communicate with handi-van Drivers to ensure they are prepared to deal with any special needs emergency. Currently Drivers do not have to provide proof of legal requirements (i.e. insurance, licence) to the Transportation Department. Drivers, however, must show proof to their employer.

### 6.3.2 Best Practices

It is recognized that the Transportation Department has demonstrated a best practice in the following area:

- Contract negotiations are completed promptly in order to ensure services can be provided uninterrupted by delays in the contract review and/or approval process.

### 6.3.3 Recommendations

*Negotiation Process*

It is understood that in the Rainy River district there are several small Operators, most which operate only one route. The current process for selecting Operators includes negotiating rates through a Negotiation Committee and assigning routes based on historical services and availability of Operators in any given area. Though this approach may be appropriate for areas where limited service is available, it is recommended that the Transportation Department move towards a competitive contracting practice.

By moving towards a competitive process, in particular in the larger centres, the Transportation Department could define its service level and expectations and local Operators could bid on the contracts based on their ability to provide the desired level of service. This does not necessarily mean that costs will decrease, however it provides the Transportation Department with the opportunity to

set service level expectations, through either a tender or RFP, and ensure that only those Operators that can meet the required level of service will be selected as preferred vendors. Additionally, it provides a measurable basis for evaluating Operator performance and provides a basis for the Transportation Department to withhold pay if service levels are not achieved. This process when used, can ensure market rates are being paid to Operators while enhancing the service level expectations and holding Operators accountable.

In areas where this process may not be appropriate, the current negotiation process may serve the needs of both the Operator and the Transportation Department. The Transportation Department however can use the competitively procured contracts as a proxy for service levels and costs negotiated with the more rural Operators.

*Parent Paid Drivers*

The Transportation Department has chosen to pay a few parents a per kilometre rate to drive their children to school as it was found to be more economical than other means of transportation. There are, however, no contracts in place with parents who are providing this transportation. It is recommended that the Transportation Department seek legal advice in order to determine if there are any risks associated with this process, and whether formal contracts are required.

## 6.4 Contract Management

Contracting practices do not end after a contract is signed. Ongoing monitoring of compliance and performance of contracted service is an important and valuable practice to enhance service levels and ensure that contractors are providing the value for money that was agreed upon. Monitoring should be performed proactively and on a regular and ongoing basis in order to be effective.

### 6.4.1 Observations

*Monitoring*

Operators are required to provide copies of valid insurance and CVOR prior to the school year. Other requirements such as licenses of Drivers are not monitored by the Transportation Department, other than the review of suspended licences reported by MTO. The Transportation Officer has recently been conducting route audits in an effort to identify efficiencies. It was noted that an Assistant was required to allow the Transportation Officer enough time to conduct these audits. Also, it is not evident that audits are being performed on a regular basis.

*Fleet Management*

The Transportation Department's policy on the maximum age of vehicles is 12 years, as indicated in the Board's standard contract. The fee structure in the contract is such that it encourages the use of vehicles to the 12$^{th}$ year: during the 10$^{th}$ to 12$^{th}$ year, ROI and Depreciation are still paid, however at a lower rate. In addition, Operators must obtain approval from Rainy River prior to the purchase of a new bus and are encouraged to run the busses until their 12$^{th}$ year. In order to support the renewal of the contracted school bus fleet, the Transportation Department pays up to $500 for shipping costs associated with the purchase of new vehicles, upon receipt of documents supporting new vehicle delivery.

*Board Owned Vehicles*

Rainy River school Board currently owns one 12 year old bus located and used at the Atikokan High School. The bus is used for school activities, and all costs associated with this bus are paid for by the school's budget not under transportation expenses for the Board. It is not used for home to school transportation. Prior to 2001, the Board did own a fleet of buses used for home to school transportation, the entire fleet, minus the one located in Atikokan, has been sold. It is understood that the remaining Board owned bus will be retired in June of 2007.

*Bus Industry*

The Rainy River local Operators face unique challenges in serving this area. Operators in this area are generally small in terms of the number of routes and buses that each company owns; 15 of the 20 Operators in the area have only one route. As such, the Operator community is very close and rely on each other for such things are radio communications (see 4.2.1) and spare buses. Driver recruitment

is the biggest issue, most of the current Drivers have been serving this area for many years and as they approach retirement, it is becoming more and more difficult to replace Drivers. One of the main reasons is the costs of licensing, the amount of responsibility, hours worked (generally not full time employment) and the training requirements (first aid/CPR, Epipen). Additionally, the increased cost of regulations is beginning to add to the pressures of continuing to operate school buses.

### 6.4.2 Best Practices

It is recognized that the Transportation Department has demonstrated a best practice in the following area:

- The Transportation Department's policy on maximum age of vehicles is 12 years and the contract structure encourages Operators to replace their fleet after 12 years.

### 6.4.3 Recommendations

*Monitoring*

It is recommended that the Transportation Department establish a plan to expand the limited contract monitoring procedures in place. The key elements to this plan should be:

- Operators should be required to demonstrate they have complied with all laws and regulations prior to start of the school year (not only insurance but also licenses);
- Operators should be required to demonstrate that they have provided their Drivers appropriate safety and first aid training prior to start of the school year. Again, Operators can provide copies of certifications or proof of training for each Driver to the Transportation Department with regular updates as additional training is received;
- Transportation Department staff should take a proactive approach and perform random audits to ensure:
    - Routes are being followed appropriately;
    - Buses being operated meet safety requirements as stated in contracts; and
    - Only assigned students utilize bus services.
- Records of these random audits and monitoring activities should be maintained by the Transportation Department as evidence that monitoring does occur.

It is also recommended that the Transportation Department consider whether a full time assistant would provide additional time to the Transportation Officer to perform more of a monitoring role while moving some of the other tasks, such as invoicing, to the Assistant.

*Board Owned Vehicles*

It is recommended that the Board retire the board owned bus in June 2007, as scheduled. This will ensure that the board's policy on maximum vehicle age is applied consistently across the jurisdiction. Should the vehicle be retained, it is recommended that the Transportation Department, in consultation with the school and the Board, apply the same requirements for safety, Driver training, and monitoring of vehicles to the board owned vehicle as they would to contracted vehicles.

## 6.5 Results of E&E Review

Contracting practices have been assessed as moderate. The standard contract is effective as it contains all key clauses and provides a cost structure that encourages the use of newer vehicles which, due to recent standards, have more safety features than older vehicles. The Transportation Department could improve its effectiveness of contracting practices by taking a more proactive role in monitoring.

Contracts for transportation services are currently not competitively awarded. By not engaging in a competitive process, the Transportation Department will not know whether they are paying market rates for services provided. If a competitive process is used for contract negotiations, the Transportation Department can clearly state all service requirements in the Request for Proposals and can be sure that it will obtain best value for money as Operators will compete to provide the required service levels at prices that ensure they earn an appropriate fee. This may not mean that rates will

decline, however the concern for the Transportation Department should be value for money. Additionally, this may not be appropriate for all areas under service or all routes depending on the available supply for services.

A competitive process should be used, where appropriate, with certain safeguards in place to protect the delivery of service. The Transportation Department should continue to enforce limits placed on the amount of business any one Operator can hold to avoid a monopoly situation. Additionally, in evaluating the successful bidders, cost should not be the overriding factor. If cost is the main selection criteria then that will encourage low cost bidders to enter the market while not necessarily ensuring that the same or improved levels of service are being provided. Local market conditions should be considered at all points in the development and evaluation of any service bids. For example, local Operators can be encouraged to participate in this process by placing a value on having local experience as part of the evaluation criteria.

# 7. Funding Adjustment

The Ministry has asked the E&E Review Team to apply their Funding Adjustment Formula to each Board that was subject to an E&E Review in Phase 1. Note that where Boards are incurring transportation expenses in multiple Consortia sites, the Board 's adjustment will be prorated for the portion attributed to the Transportation Department under review. For example, if 90% of Board A 's expenditures are attributed to Consortium A , and 10% of expenditures are attributed to Consortium B, the funding adjustment resulting from Consortium A's review will be applied to 90% of Board A's deficit or surplus position.

The Ministry's funding formula is as follows:

| Overall Rating | Effect on deficit boards[7] | Effect on surplus boards[7] |
|---|---|---|
| High | Reduce the gap by 100% (i.e. eliminate the gap) | No in-year funding impact; out-year changes are to be determined |
| Moderate-High | Reduce the gap by 90% | Same as above |
| Moderate | Reduce the gap by 60% | Same as above |
| Moderate-Low | Reduce the gap by 30% | Same as above |
| Low | Reduce the gap in the range of 0% to 30% | Same as above |

Based on the Ministry's funding formula, in conjunction with our E&E assessment of the Transportation Department, it is anticipated that the following funding adjustments will be made for each Board:

Rainy River District School Board

| Item | 2006/2007[8] |
|---|---|
| Transportation Surplus (Deficit) | $(345,253) |
| E&E Rating | Moderate |
| Funding Adjustment based on Ministry's Funding Adjustment Formula | Increase by 60% of deficit |
| Total Funding adjustment | $207,152 |

Northwest Catholic District School Board

| Item | 2006/2007 |
|---|---|
| Transportation Surplus (Deficit) | $(66,820) |
| % of Surplus attributed to the Transportation Department (rounded) | 51% |
| Revised Deficit to be assessed under the Transportation Department | $34,255 |
| E&E Rating | Moderate |
| Funding Adjustment based on Ministry's Funding Adjustment Formula | Increase by 60% of deficit |
| Total Funding adjustment | $20,553 |

[7] This refers to boards that have a deficit/surplus on student transportation

[8] Based on budgeted figures received by the Ministry - source: Data form D 208C

# Glossary of Terms

| | |
|---|---|
| Academic Committee | Proposed oversight body as described in Section 3.2 |
| Accountant | As shown in Figure 7 |
| Act | *Education Act* |
| Assessment Guide | The guide prepared by the E&E review team and the Ministry of Education which will be used as the basis for determining the overall effectiveness and efficiency of each Consortium |
| Common Practice | Refers to a set of planning parameters that have been reported by Ontario school boards as the most commonly adopted planning policies and practices. These are used as references in the assessment of the relative level of service and efficiency. |
| Communication/Dispatch Officer | As shown in Figure 7 |
| Consortium | As defined in the Ministry of Education's numbered memorandum 2006: SB13, dated July 11 |
| CPR | Cardiopulmonary Resuscitation |
| CVOR | Commercial Vehicle Operator's Registration |
| Deloitte | Deloitte & Touche LLP (Canada) |
| Driver | Refers to bus Drivers, see also Operators |
| EDULOG | The routing software used by the Transportation Department |
| E&E | Effectiveness and Efficiency |
| Effective | Having an intended or expected effect; the ability to deliver intended service |
| Efficient | Performing or functioning in the best possible manner with the least waste of time and effort; the ability to achieve cost savings without compromising safety |
| E&E Reviews | As defined in Section 1.1.4 |
| E&E Review Team | As defined in Section 1.1.5 |
| Evaluation Framework | The document, titled "Evaluation Framework For the Rainy River Transportation Services" which supports the E&E Review Team's Assessment; this document is not a public document |
| Evaluation Work Sheets | As defined in Appendix 2 of the Evaluation Framework |
| Funding Adjustment Formula | As described in Section 1.3.6 |
| HR | Human Resources |
| IT | Information Technology |
| JK/SK | Junior Kindergarten/Senior Kindergarten |
| Management Committee | Proposed oversight body as described in Section 3.2 |
| Management Consultants | As defined in Section 1.1.5 |
| Memo | Memorandum 2006: SB13, dated July 11 issued by the Ministry |
| Ministry | The Ministry of Education of Ontario |
| MPS | Management Partnership Services Inc., the routing consultant, as defined in Section 1.1.5 |
| MTO | The Ministry of Transportation of Ontario |
| Negotiation Committee | The body representing the local Operators who are involved in contract negotiations, as described in Section 6.2.1 |

| | |
|---|---|
| Northwest | The Northwest Catholic District School Board |
| Operators | Refers to companies that operate school buses and the individuals who run those companies. In some instances, an Operator may also be a Driver. |
| OSBA | Ontario School Bus Association, the provincial Association to which some Operators may be affiliated |
| Overall Rating | As Defined in Section 3.2 of the Evaluation Framework |
| Partner Boards or Boards | The school boards that have participated as full partners in the Consortium |
| Purchasing Payable Clerk | As shown in Figure 7 |
| Rainy River | The Rainy River District School Board |
| Rating | The E&E Assessment score on a scale of High to Low, see Section 1.3.4 |
| Receptionist, Assistant or Transportation Officer's Assistant | As shown in Figure 7 |
| Report | The report prepared by the E&E Review Team for each Consortium that has undergone an E&E Review (i.e. this document) |
| ROI | Return on Investment |
| SBO | Superintendent of Business |
| Service Purchasing Boards | Refers to School Boards who purchase student transportation services for their students through the Transportation Department. These Service Purchasing Boards are not full partners in the consortium |
| SIS | Student Information System, as described in Section 5.3.1 |
| Transportation Department | The Rainy River Transportation Services |
| Transportation Officer | As shown in Figure 7 |
| Transportation Peer Reviewer | As defined in Section 1.1.5 |

# Appendix 1: Financial Review – by School Board

Rainy River District School Board

| Item | 2004/2005 | 2005/2006 | 2006/2007[9] |
|---|---|---|---|
| Allocation[10] | $2,022,905 | $2,183,120 | $2,138,495 |
| Expenditure[11] | $2,230,036 | $2,381,440 | $2,483,748 |
| Transportation Surplus (Deficit) | $(207,131) | $(198,320) | $(345,253) |

Northwest Catholic District School Board

| Item | 2004/2005 | 2005/2006 | 2006/2007[9] |
|---|---|---|---|
| Allocation[10] | $950,585 | $994,499 | $1,017,678 |
| Expenditure[11] | $989,781 | $933,716 | $1,084,498 |
| Transportation Surplus (Deficit) | $(39,196) | $60,783 | $(66,820) |
| Total Expenditures paid to Rainy River Board | $447,433 | $478,658 | N/A |
| As % of total Expenditures of Board[12] | 45% | 51% | N/A |

[9] Based on budgeted figures received by the Ministry - source: Data form D 208C

[10] Allocations based on Ministry data – includes all grant allocations for transportation (Section 9 0008C, Section 13 00006C, Section 13 000012C)

[11] Expenditure based on Ministry data – taken from Data Form D: 730C (Adjusted expenditures for compliance) +212C (Other revenues) + 798C (Capital expenditures funded from operating)

[12] Rounded to nearest whole number

# Appendix 2: Common Practices[13]

| | JK/SK | Elementary Gr. 1-3 | Elementary Gr.4-6 | Elementary Gr. 7-8 | Secondary Gr. 9-12 |
|---|---|---|---|---|---|
| **Home to School Distance** | | | | | |
| Common Practice | 0.8 | 1.2 | 1.6 | 1.6 | 3.2 |
| Policy – Rainy River/Northwest | 0.0 | 1.0 | 1.6 | 1.6 | 3.2 |
| Practice – Rainy River/Northwest | | | **Note 1** | | |
| **Home to Bus Stop Distance** | | | | | |
| Common Practice | 0.5 | 0.8 | 0.8 | 0.8 | 0.8 |
| Policy – Rainy River | 0.0 | 0.16 | 0.16 | 0.16 | 0.16 |
| Practice – Rainy River/Northwest | | | **Note 2** | | |
| **Arrival Window** | | | | | |
| Common Practice | 18 | 18 | 18 | 18 | 25 |
| Policy – Rainy River | 15 | 15 | 15 | 15 | 30 |
| **Departure Window** | | | | | |
| Common Practice | 16 | 16 | 16 | 16 | 18 |
| Policy – Rainy River | 10 | 10 | 10 | 10 | 10 |
| **Earliest Pick Up Time** | | | | | |
| Common Practice | 6:30 | 6:30 | 6:30 | 6:30 | 6:00 |
| Practice – Rainy River/Northwest | | | **Note 3** | | |
| **Latest Drop Off Time** | | | | | |
| Common Practice | 5:30 | 5:30 | 5:30 | 5:30 | 6:00 |
| Practice – Rainy River/Northwest | | | **Note 3** | | |
| **Maximum Ride Time** | | | | | |
| Common Practice | 75 | 75 | 75 | 75 | 90 |
| Policy – Rainy River | 60 | 60 | 60 | 60 | 60 |
| Practice – Rainy River/Northwest | | | **Note 3** | | |
| **Seated Students per Vehicle** | | | | | |
| Common Practice | 69 | 69 | 69 | 52 | 52 |
| Policy – Rainy River | 72 | 72 | 72 | 48 | 48 |

NOTE 1 - Although policy is usually followed, it was noted that some elementary students (within the service eligibility distance) in urban areas may be provided with bus service as courtesy riders.

NOTE 2 - It was noted that for students in rural areas, a home to bus stop distance is not usually enforced (see section 4.2).

NOTE 3 - Some students in the jurisdiction live exceptionally far from their nearest schools. This leads to some exceptionally early pick-up times, late drop-off times, and long ride times. These exceptions provide a distorted picture of the pick-up, drop-off and ride times for most students in the region.

[13] Common Practices refers to a set of planning parameters that have been reported by Ontario school Boards as the most commonly adopted planning policies and practices. These are used as references in the assessment of the relative level of service and efficiency. See Glossary of Terms.

# Appendix 3: Document List

| | |
|---|---|
| 1 | Ministry of Education Board Profile |
| 2 | 2005/2006 Ministry of Education Survey Results |
| 3 | Transportation Effectiveness and Efficiency Review Guide |
| 4 | Consortia Plan Submission Template, November 6, 2006 |
| 5 | The Northwest Catholic District School Board Administrative Procedures |
| 6 | Rainy River District School Board Transportation Policy |
| 7 | Purchase of Service Agreement Memo |
| 8 | Budget Development Memo |
| 9 | Transportation Services Organizational Chart |
| 10 | Rainy River District School Board Purchasing Policy |
| 11 | Rainy River District School Board - 2005/2006 Efficiency Study Results and Recommendations |
| 12 | Dispute Resolution Practices Flow Chart |
| 13 | Northwest Catholic District School Board – Transportation Expenditures |
| 14 | Rainy River District School Board – job description for Transportation Officer |
| 15 | EDULOG Service, License and Maintenance Agreement |
| 16 | Rainy River District School Board – Financial Statements – Transportation Department Expenses 2002/2003, 2003/2004, 2004/2005 and 2005/2006 year ends and budgeted 2006/2007 |
| 17 | Example of Transportation Operator expenses reconciliation and allocation |
| 18 | Tendering of Bus Contracts Memo |
| 19 | Sample Operator Contract |
| 20 | List of Operators and Vehicle age |
| 21 | Route Reports |
| 22 | Hard copy maps |
| 23 | Description of operations as prepared by the SBO |

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